

**INSIDE: MACBOOK'S FORCE TOUCH TRACKPAD CHANGES EVERYTHING**

# Macworld

May 2015

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## 12-inch MacBook hands-on: Great keyboard and trackpad, but only one port

There are two ports—if you count the headphone jack. But the new 12-inch MacBook didn't get so thin and light without making tradeoffs.

BY SUSIE OCHS

**W**hat's lighter than Air? The all-new MacBook. Apple's newest, golddest laptop is lighter and thinner than the MacBook Air, and sports a gorgeous Retina display like the top-of-the-line MacBook Pros. But this isn't an Air or a Pro. It's just a MacBook, and yet... it changes everything.

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The first thing I noticed during my hands-on time is the MacBook's screen. The colors are bright and vivid, and the 2304x1440 resolution shows all the detail you're used to seeing on a Retina display. The bezel around the screen has shrunk significantly. The screen doesn't go completely edge to edge, but it's pretty darn close.

## **A KEY UPGRADE**

The laptop is incredibly thin and light, but keyboard real estate doesn't suffer. Apple put a full-size keyboard on the new MacBook, and even decreased the space between the keys a little bit—the keys themselves are actually 17 percent bigger than those on current Mac laptops. My fingers didn't feel cramped like they do when using a keyboard that's sized for the iPad, for example.

Apple replaced the scissor-switch key mechanism deployed in current MacBooks with a new kind of switch the company calls the butterfly mechanism. With this new hardware, your keys go straight up and down no matter where on the key you





**THE MACBOOK'S THIN** bezel seems to fade away as you look at the gorgeous Retina display.

press. Conversely, on a scissor switch keyboard, if you happen to tap the edge or the corner of a key, you can feel the key “lean” that way.

But the new MacBook's keys feel the same no matter where your fingers strike them. The keyboard is backlit, but each key gets its own LED light, so they'll all have the same brightness level.

Speaking of LEDs, the Apple logo on the MacBook doesn't light up. I know, I'm a little bummed too. But

the new MacBook is still capable of turning heads since it's the first Apple laptop available in gold—you know, to match the gold-toned iPad and iPhone. (And who knows, maybe Apple will bring back the light-up logo in a future iteration.)

## **FORCE TRACKPAD**

The MacBook's trackpad has some cool advancements too. The trackpad on existing Apple laptops hinges at the top, so a physical click at the



top of the trackpad feels different than a click at the bottom. But on the new MacBook, there's no hinge, so no matter where you click, it feels the same.

OK, this change sounds pretty minor, but the hinge-less design enables the trackpad to have a new Force Click gesture. You can tap or click something to select it as normal, but when you push down harder on the fully pressure-sensitive trackpad, you initiate a Force Click, which is a shortcut to new capabilities.

For example, you can Force Click a Mail attachment to Quick Look at it instead of clicking to select it, and then tapping the space bar. You can Force Click an address to see it on a map. You can Force Click a date and time to create a new calendar

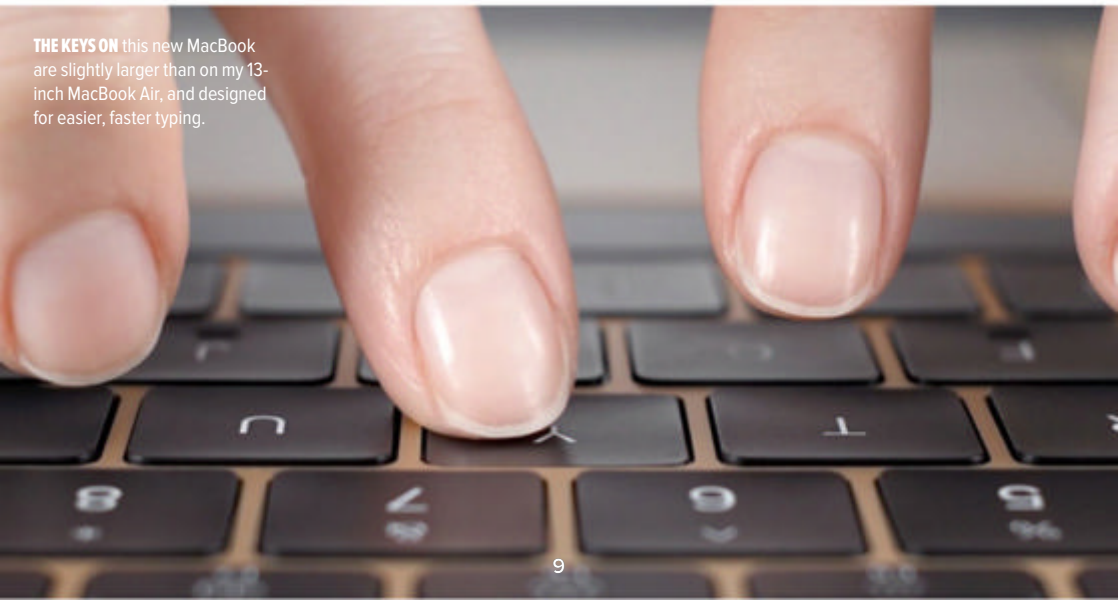
event. And you can Force Click a word to look it up on Wikipedia. I found this to be super handy—and faster than right-clicking and digging through contextual menus. It'll save MacBook owners a lot of time.

## JUST ONE PORT

Think of all the ports you've used on your Apple laptops through the years: MagSafe and its little brother MagSafe 2. FireWire 400 back in the day. USB 2 and USB 3 (which was only added to the Mac lineup in June 2012 - [go.macworld.com/usb3](http://go.macworld.com/usb3)). And Thunderbolt. Oh, poor Thunderbolt. Those are all gone. The new MacBook doesn't even have an SD card slot. It's only got one port. One. Port.

OK, OK, two ports. You can plug in your headphones.

**THE KEYS ON** this new MacBook are slightly larger than on my 13-inch MacBook Air, and designed for easier, faster typing.



But the single port you'll use for everything else is called USB-C, and it holds some impressive technology—we'll have a deeper dive as we can get our (many) questions answered. What we know so far is that it replaces MagSafe for charging, USB for connecting peripherals, and HDMI, VGA, and DisplayPort for connecting external screens. What's missing from that list? Yup, Thunderbolt. Every single other Mac has a Thunderbolt port, so if you've made the investment in Thunderbolt devices ([go.macworld.com/tbolt](http://go.macworld.com/tbolt)), this may not be the MacBook for you.

Obviously, you'll need an adapter—you can't shove a big honkin' HDMI cable into the tiny USB-C port. Apple is selling a USB adapter for \$19 so you can plug in exactly one USB device. Two Multiport adapters are also on offer for \$79 each. The USB-C VGA Multiport Adapter has a pass-through USB-C port for your charging cable, plus standard USB 3.1 and VGA. The USB-C Digital AV Multiport Adapter has USB-C passthrough for charging, plus HDMI and standard USB 3.1. A DisplayPort adapter is coming later.

If that sounds confusing...well, this MacBook is meant to fly solo. Free as a bird. Unencumbered by wires. I use my trusty 13-inch MacBook Air as

**...IF YOU'VE MADE THE INVESTMENT IN THUNDERBOLT DEVICES, THIS MAY NOT BE THE MACBOOK FOR YOU.**

my everyday machine, and almost all of its ports see daily use. I connect to a Thunderbolt Display, a USB hard drive for Time Machine, and even a four-port USB hub to keep all my gadgets charged. The MacBook is better suited for people who want the lightest machine possible—and who can mostly lean on wireless connection methods like AirPlay, AirDrop, Bluetooth, and Wi-Fi. Need more ports? Look to the other machines. Or perhaps a third-party dock—sounds like Henge ([go.macworld.com/henge](http://go.macworld.com/henge)) has plans to build one.

## HANDS ON IMPRESSIONS

With a great keyboard, a beautiful screen, and a time-saving trackpad, the new MacBook has a lot going for it. Some may find it a struggle to adapt (no pun intended) to a single-port lifestyle, but if that doesn't sound like a big deal, your reward is a slick, golden laptop that only weighs two itty-bitty pounds. As much as I think I need all the ports on my 2.96-pound MacBook Air, I could probably deal with adapters to get the weight down that far. My head says no, but my back and shoulders say yes. ■

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# The MacBook's new trackpad will change the way you click

To make the new MacBook so thin, Apple had to shrink the keyboard's height and remove the trackpad's up-and-down click. So far, we like it that way.

BY JASON SNELL

**T**he latest MacBook update has given people who follow Apple news plenty to talk about. But for Mac users, the biggest news has to do with all the ways the new MacBook diverges from what we've been used to.

No MagSafe, Thunderbolt, or standard USB ports, all replaced by a single USB-C port—that's big news, undoubtedly. But I'm just as interested in the different approach Apple is taking with input devices. After all, the new MacBook's keyboard and trackpad are unlike any of those currently found in the Mac line.

### **THE MAC STANDARD**

In the past few years, the Mac product line has been more consistent than I can remember it having been for ages. USB and Thunderbolt are everywhere. (It's never been easier to be someone who brings a Mac into a room to do a slide presentation, since every Mac can



use a Mini DisplayPort connector.) All of Apple's keyboards, desktop and laptop, have been the same exact design for quite a while now. And while buyers of new desktop Macs can opt for a mouse, they can also buy a Bluetooth trackpad that more or less matches the one found in Apple's laptops.

Welp. Here comes the MacBook, shaking things up. That's not necessarily a bad thing, but unless the MacBook remains a strange outlier, we may be witnessing an end to this era of stability and the beginning of a

caps, the clever design of the butterfly keyboard switches, the stainless steel dome switches. So is this a compromise keyboard specifically designed for the MacBook, or does Apple feel this keyboard design is so great that it's going to make sure that all its future Mac keyboards are exactly the same way?

I type around 110 words per minute and write for a living, so keyboards are very important to my livelihood, though I would not remotely call myself a keyboard snob. After the event, I spent a lot of



shake-up in everything we take for granted on the Mac. (Start packing those video adapters again, friends.)

## THE NEW KEYBOARD

Apple designed the keyboard in the new MacBook to have reduced key travel, presumably because the thing is just too thin to allow those keys to move very far up or down. That seems reasonable, but when Apple extolled the virtues of the new keyboard, they raved about the increased size and stability of its key

time typing on the new MacBook keyboard in the demo area. I'm not ready to render any final judgments—I'm going to need to live with a MacBook for a few days before I can do that—but I can attest that this new keyboard is going to take some getting used to.

The very small amount of key travel is the first thing I noticed. When you

**...I CAN ATTEST  
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USED TO.**





**APPLE SAYS** the new keyboard's butterfly mechanism is more stable than the old scissor-switch keys.

push a key, it depresses slightly, and lands hard (presumably on that stainless steel dome switch). It doesn't feel at all like a cheap keyboard, but it's a shockingly different feel than the current crop of Apple keyboards. It's like a cross between those current Apple keyboards and typing on an iPad screen, if that makes any sense—it's got the physical feel of a real keyboard but the hard landing of hitting that glass screen.

In fact, I found that I typed a lot faster on the new MacBook keyboard once I adapted some of my iPad typing technique to the new keyboard. My typing style on a physical keyboard includes a lot of force as a push through depressing each key. With the new MacBook keyboard, when I started thinking of just tapping the key with a finger (as if I was tapping the keys on an iPad's screen) and not using any extra force, things started to move a lot better.

Apple says the new keyboard's butterfly mechanism is more stable than the old scissor-switch keys.

Apple claims that the keys are far more stable than previous keyboards, and that seems right, though I admit that I've never really had a complaint about the keys on my keyboard feeling unstable. Each key cap is larger, which means they should be easier to hit—but the space between keys has been reduced, which would seem to me to be a decision that would increase the chances that your finger will hit the wrong key.

Beyond the changes to the key movement itself, this keyboard offers a few other interesting features. Each key is individually LED lit. (Can each LED be controlled separately, so we could turn the keyboard into a bunch of blinking Christmas lights?) The Escape key has been elongated and the function keys narrowed. The arrow keys have been redesigned; the up and down arrows are still

half-height, but the left and right arrows are now full sized. I can't decide if I like it or not, so for now I'll just say: Change acknowledged.

The fact is, any time you switch to a new keyboard, there's an adjustment period, especially if the keyboard style is drastically different. That's the case here. Still, my gut feeling is that this is the best keyboard Apple could make given the constraints of the MacBook. It's too early to say for sure, but if I had to make a judgment right now I'd say that I hope this keyboard stays with the MacBook and goes no further.

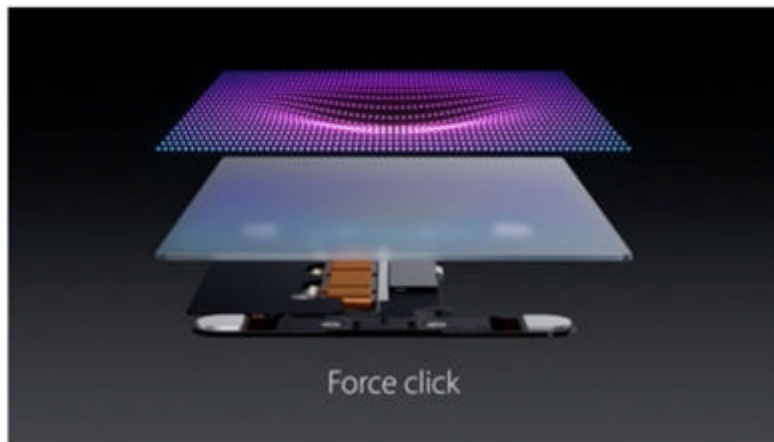
## THE NEW TRACKPAD

The highlight of my time using the MacBook in the hands-on area after the event was undoubtedly using the new Force Touch trackpad. It messes with your head, but in a good way. I

may be cautious when it comes to the keyboard, but I'm in love with the new trackpad.

I have never liked the tap-to-click gesture on trackpads, preferring a physical click. So hearing that the new MacBook trackpad doesn't actually depress made me despair. But what Apple has implemented—a series of force sensors underneath the trackpad surface and a Taptic Engine that can vibrate the surface on demand—is a remarkable simulation of the real thing. If I hadn't known how the thing worked, I would've sworn that Apple had gotten its own announcement wrong and that this trackpad was just like all of the other trackpads on other Apple laptops.

Nope! When you press on the trackpad, the Taptic Engine fires up and shakes the surface of the track-



**THE TRACKPAD** is pressure sensitive, and responds to your press with a vibration that feels like a click, but isn't.

pad. Your brain interprets the vibration and the pressure as a downward click, even though that's not what's actually happening. (The vibration from the Taptic Engine is from side to side, not up and down.)

This is all presumably to drive a little more thickness out of the MacBook, but it has a fun side benefit: Now the clickiness of the trackpad can be controlled by software. A new slider in the Trackpad system preference pane lets you adjust how much force is required for a click, so you can tweak it to fit your preferences.

More impressively, Apple should be rolling this functionality out to third-party Mac developers soon. I'm really curious to see what sorts of features they'll dream up. As a proof of concept, Apple demonstrated a version of QuickTime Player that allows you to adjust the fast-forward speed based on how hard you press on the fast-forward button. The feature itself is a little gimmicky, but as a demo for the new trackpad it was impressive. The harder I pressed on the trackpad, the more clicks I felt. It was as if the trackpad was tabbed somehow, so I could feel as I pushed through each successive step to the next.

And all the while, the trackpad

wasn't actually moving lower—it was all in my mind. It was enough to make me immediately desire a version of this trackpad for my desktop.

The new MacBook also introduces an entirely new gesture to the Mac vocabulary. You know about clicks, double-clicks, and control-clicks (or right-clicks or two-finger-clicks). Now meet the Force click. On the version of OS X running on the MacBooks in the demo room, I could click extra hard on a word on a web page in Safari, and it

**...THE TRACKPAD WASN'T ACTUALLY MOVING LOWER—IT WAS ALL IN MY MIND. IT WAS ENOUGH TO MAKE ME IMMEDIATELY DESIRE A VERSION OF THIS TRACKPAD FOR MY DESKTOP.**

would open a floating palette with a dictionary definition or a link to a Wikipedia page. (In technical terms, Apple has wired its Data Detectors technology to the Force click feature in Safari. On today's Macs, you'd have control-click on a word and choose Look Up to perform the exact same feature.) In Finder, a Force click kicks off a Quick Look preview.

Again, presumably developers will be able to support Force clicks in interesting ways. But with both of these features we're back to that whole idea of "the Mac standard"

again: The number of Macs that support these gestures will be few and far between for quite a while yet. Even if Apple does move Force touch into every trackpad it makes—which I think is likely—it'll be awhile before a majority of Mac users can take advantage of those features. Still, the idea of giving trackpad gestures an additional dimension seems great to me. But then, I am a committed trackpad user. Can you Force-click a mouse? Maybe we'll find out someday soon.

Let's not forget that the existence of the Taptic Engine isn't just wired to emulating mouse clicks. According to Apple, the Force Touch trackpad can communicate other goings-on on your Mac to you via a vibration. Imagine dragging to center a text block in Keynote, and feeling when you hit dead center, rather than just seeing it on screen. The new trackpad makes that kind of interaction possible.

## ERAS OF CHANGE

It's human nature to prefer stability and fear change. After a nice era of stability for the Mac platform, it sure feels like the new MacBook is ushering in an era of change. It remains to be seen just how many of its innovations make it across to the rest of the Mac product line, but Apple rarely does things halfheartedly. I'm excited about the future of the Force Touch trackpad and a little more skeptical about the MacBook's new keyboard, but there's no doubt that both of them may change the way we all use our Macs in the next few years. ■

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**JASON SNELL** IS THE FORMER EDITORIAL DIRECTOR OF MACWORLD, AND HAS REVIEWED EVERY MAJOR APPLE PRODUCT OF THE LAST FEW YEARS, INCLUDING THE ORIGINAL IPHONE AND IPAD AS WELL AS EVERY MAJOR VERSION OF MAC OS X. CHECK OUT [SIXCOLORS.COM](http://SIXCOLORS.COM) FOR HIS LATEST APPLE COVERAGE.

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V I D E O G A M E V O T E R S . O R G



# USB-C is our new connection overlord. Get used to it.

In with the new, and out with the everything else. We've been Thunderbolted!

BY GLENN FLEISHMAN





**W**hen news of a new Mac notebook leaked in January, one of the aspects that seemed absurd was the omission of multiple ports. There would be just one hole and it would be USB-C, a format never before seen in a Mac and unfamiliar to most people, as it was only unveiled in production equipment last September.

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Turns out, it wasn't absurd at all. With the new 12-inch MacBook ([go.macworld.com/newmb](https://go.macworld.com/newmb)), Apple has gone all in for all-in-one, using USB-C to provide power, display output, and USB connections. Thunderbolt is gone. The SD card slot is gone as well. And the MagSafe component of the power connection has disappeared into very thin Air—I mean, thin MacBook. (Magnets? How do they work?)

Apple says that USB-C adapters can provide HDMI, DisplayPort, VGA, ethernet, and USB 3.1 support, and can both power a computer and send power to attached peripherals. Notably, ethernet and DisplayPort options aren't

included in the current USB-C accessories list at the Apple Store.

Thunderbolt is the really big loser in the new 12-inch MacBook: USB-C can't support Thunderbolt devices.

In the pursuit of slimness, sleekness, and simplicity—the same goal that brought us Lightning—Apple has seemingly done with Thunderbolt what it once did with FireWire. But is USB-C a worthwhile shift for users? Well, all interfaces are compromises in one way or another, and Apple believes USB-C meets more custom-



**APPLE THINKS** that with all-day battery life and wireless capabilities, we just won't need to connect our new MacBooks to much.



**FIREWIRE HAD** such promise. Apple even made a FireWire 800-to-Thunderbolt adapter for the most recent Macs. It won't work on the new MacBook at all.

ers' needs, even as the new interface throws some people off a cliff.

The upside is compatibility, and thus lower costs and more options. USB-C is also a unifying and universal standard that doesn't involve a single company acting as a licensing gatekeeper, the way Apple protects Lightning cables and adapters. USB-C would seem to have a lot to offer, but first we have to get over the hump of newness.

## FIREWIRE IN THE HOLE!

We've gone through this before, and every iteration brings pain and joy. The pain comes from having to purchase new adapters and figure out the limitations of the new interface. The joy flows from improvements in performance and flexibility, and simplicity in making connections.

The bump from Apple Desktop Bus (ADB, Apple's original serial peripheral standard for keyboards) and SCSI (for hard drives and scanners, among other uses) to USB 1.1 was a big one in the first iMac circa 1998. ADB was slow, required daisy-chain-

ing, and could be finicky. SCSI was fussy as all get out, despite its relatively high speed. (Remember terminators? Self-termination? Numbering devices? Running out of numbers?)

But USB let you plug and unplug, even while devices were in use! Sure, you could leave a hard drive in a weird state by unplugging before it was fully unmounted, but you at least wouldn't fry its circuits by accident.

USB 1.1 was always an intermediate step. At 12Mbps, it was far too slow. and USB 2 wasn't ready when Apple was. FireWire 400's introduction just a year later offered a vast improvement in speed. FireWire 800 doubled that a couple of years after, but despite a path to 1600 Mbps and 3200 Mbps, the standard was mostly single purpose: a way to move data rapidly among storage.

Enter Thunderbolt ([go.macworld.com/bolt](https://go.macworld.com/bolt)), the unifier. Originally slated to work over resilient fiber optic cables, allowing low power requirements and long distances, the first release was a bit of a compro-

mise. It used copper wire and could extended only three meters (10 feet) maximum, but could also deliver power, which wasn't part of the optical specification. The first version shipped on a Mac just four short years ago.

The video standard DisplayPort, which has many potential variations of throughput, each of which can support a maximum refresh rate and monitor resolution, was supported as something that flowed over Thunderbolt, allowing forward compatibility. A Thunderbolt connection could support a DisplayPort equipped

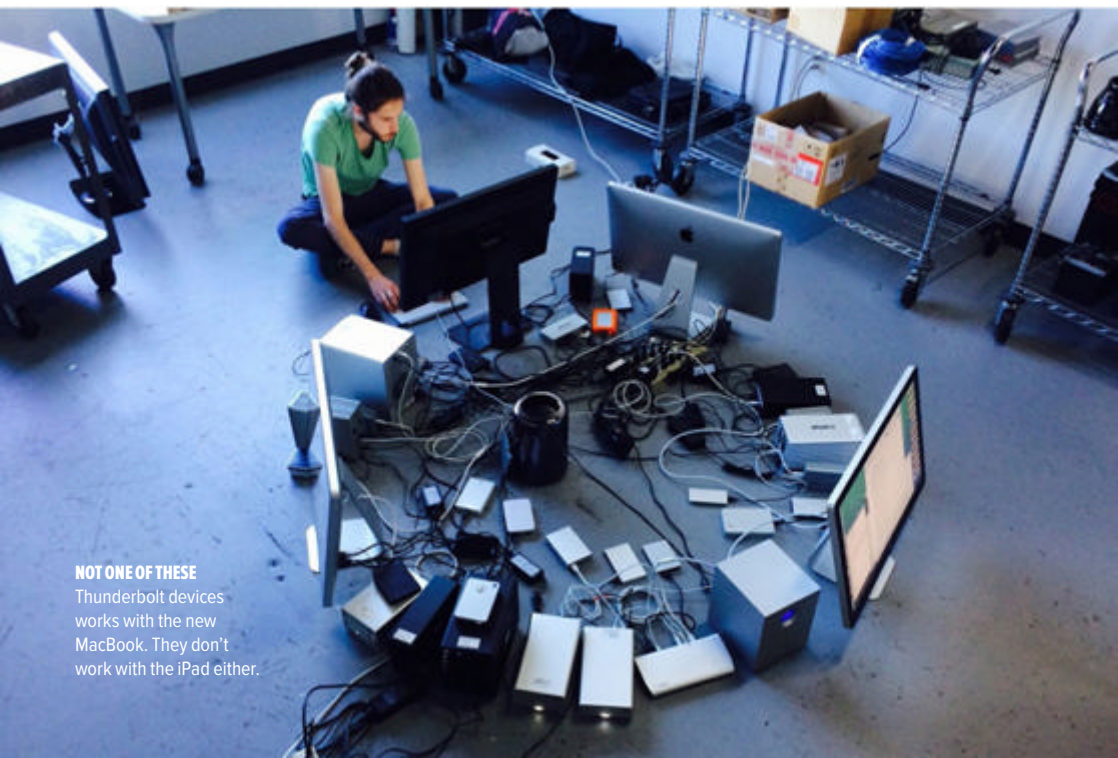
monitor. Thunderbolt's first iteration was 10Gbps per channel, allowing an aggregate of 40Gbps (20Gbps in each direction). Thunderbolt 2 doubled that throughput.

But Thunderbolt stalled. While it's available in computers beyond Macs and in peripherals from many companies, it's never become pervasive. The rest of the industry has focused efforts on USB 3. Apple may eat a hunk of the profit in the PC market, but for unit volume among all connection types, USB is orders of magnitude higher.

Apple didn't disregard progress on

#### **NOT ONE OF THESE**

Thunderbolt devices works with the new MacBook. They don't work with the iPad either.



USB, adding USB 3 ports in Mac models that started shipping in 2012. But you can only shrink a mini-DisplayPort connector used for Thunderbolt so far. It's got one correct orientation, and it can't easily be used to power other devices via a single port.

Thunderbolt was essentially too expensive to implement on inexpensive devices. It also has licensing rules that deterred some manufacturers. The USB-C adapter format avoids just these kinds of roadblocks.

The USB-C spec is under the control of the USB 3.0 Promoter Group. Apple wasn't among the key members that drafted version 3.1, but it had heavy engineering participation in developing USB-C. The group engages in no preferential or discriminatory treatment about who may license or use it. Lightning can't support the data rate needed for peripherals, nor the wattage required for a notebook. Nor can it achieve the industry adoption needed for an ecosystem.

Within that worldview, USB-C seems more inevitable than unexpected, and we'll ultimately get used to it.

## USB ALL THAT YOU CAN USB

While USB 3 is a few years old, USB-C only debuted last September, and

**...USB-C ONLY DEBUTED LAST SEPTEMBER, AND WAS CLEARLY DESIGNED IN PART TO REPLICATE THE ADVANTAGES OF APPLE'S LIGHTNING CONNECTORS.**

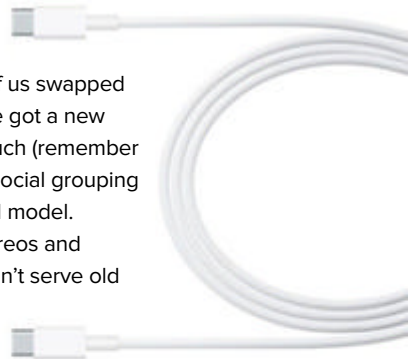
was clearly designed in part to replicate the advantages of Apple's Lightning connectors. It's slim and reversible. Apple's flavor has a raw data rate of 5Gbps, and passes 29 watts of charge from the included power adapter.

The Dock-to-Lightning transition was painful for iOS devices, because many of us had invested in an ecosystem that relied on the Dock connector. Most of us swapped our iOS device when we got a new iPhone, iPad, or iPod touch (remember those?), and in a home social grouping would pass down an old model. Lightning meant our stereos and cables and docks wouldn't serve old and new, yet the old devices still had plenty of life in them.

Worse, most people I know with an iPhone have two or more cables, sometimes permanently installed in different places, like a car, or stashed as an extra in a satchel or purse. The early Lightning adapters were \$29 for

### THE NEW MACBOOK

USB-C charging cable is USB-C at both ends, and the charging brick has a USB-C port.



a little stub and \$39 for a cable. You could wind up with incompatible audio and other gear, and \$150 of cable costs. It annoyed people, and rightly so, because it felt like an upgrade penalty instead of benefit.

But the situation is different with the MacBook, as you won't lose a lot of sunk costs if you're shifting from one Mac laptop to the MacBook. The only interface types you lose are MagSafe and Thunderbolt. If you need Thunderbolt devices, this isn't the computer for you. Your MagSafe adapters, meanwhile, can clearly continue to be used with your older computer, whether you keep using it or pass it on.

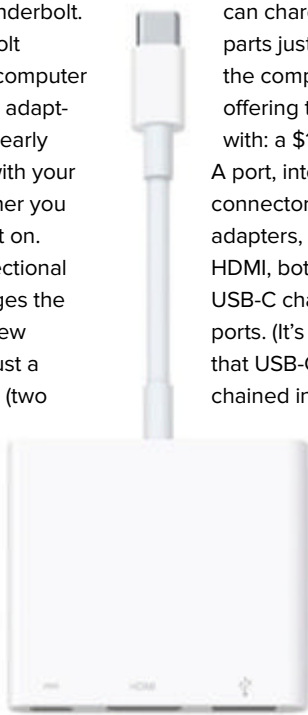
USB-C allows bidirectional charging, which changes the cable equation. The new computer ships with just a USB-C charging cable (two meters, \$29 sold separately) and a 29-watt power adapter with a USB-C jack (\$49 separately). The charger can power an iPhone or iPad (with a Type A USB adapter), and ostensibly the MacBook could be charged via any

existing USB charger—although a 5-watt or 10-watt charger or a 10-watt or 12-watt car adapter will cause it to use up its battery much more slowly or charge very slowly while sleeping. (I was unable to get confirmation on whether the MacBook could be charged by a non-USB-C adapter, but the spec seems to call for it.)

With a USB-C adapter that splits into multiple interface types, you can charge devices over its USB parts just as if they were part of the computer's hardware. Apple is offering three adapters to start with: a \$19 USB-C to USB 3.1 Type A port, into which a regular Type A connector can fit; and \$79 A/V adapters, one for VGA and one for HDMI, both of which also sport USB-C charging and USB Type A ports. (It's unclear at this writing if that USB-C charging port can be chained into more adapters, but it

seems very likely based on the spec.)

Apple isn't offering gigabit ethernet or DisplayPort adapters in its initial foray, but these adapters should be available soon from third parties. Last year, such adapters were expected in early 2015, and this



**APPLE HAS ANNOUNCED** two \$79 Multiport AV adapters. One has HDMI and the other VGA, and they both also sport a USB-C port and a standard USB port.



availability projection may be one reason Apple didn't ship the new MacBook until April. Its spec sheet says that the MacBook comes with "native DisplayPort 1.2 output," which will support 4K (3840x2160 pixels in dual monitor or mirroring modes), but there's technically no way today to access that stream of video data.

A spec was set last September ([go.macworld.com/spec](http://go.macworld.com/spec)) to encapsulate DisplayPort inside a USB-C to USB-C cable, just like Thunderbolt encapsulated DisplayPort, so we'll likely see some of that in future monitors as well.

## THE POWER PERSISTS

Thunderbolt isn't dead and USB-C doesn't look like it's going to kill it off soon. Indeed, it seems likely that USB-C will wind up replacing ports on consumer-leaning Macs, like future MacBooks (if 12-inch isn't the only model), Mac minis, and iMacs, while the Mac Pro and MacBook Pro will probably retain Thunderbolt for the

highest performance with external drives and other peripherals.

If you're dead set on buying a USB-C machine, make sure you know what you're getting into—especially if you use your laptop as a fully appointed portable workstation like I do. Before ordering, you need to make sure the particular multi-prong adapters you'll need are available, compatible, and affordable.

It could be that Apple is signaling the post-peripheral era, appealing to a new majority of users who really only need USB to charge their machines. The current MacBook's SD Card slot is of little use to an iPhone photographer, for instance.

And with more than 9 hours of battery life, many mobile-first users can comfortably give up their single do-everything USB-C port when they need USB connectivity for, say, a thumb drive. Sure, that USB-C port is also your lifeline to charging power. But the definition of "power" user could be about to change. ■

**WANNA PLUG** your USB device into your new MacBook? That'll be \$19 for the USB adapter.



Welcome to Greenbot,  
a website for  
Android enthusiasts.



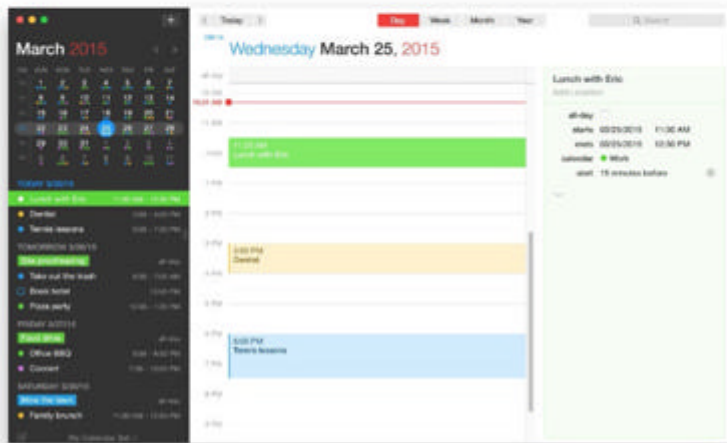
We've got the 'droid info you're looking for.  
Helpful tips, critical reviews, and expert  
analysis for passionate Android users  
of every experience level.

**[www.greenbot.com](http://www.greenbot.com)**





MAC GEMS ARE APPS THAT OFFER STANDOUT UTILITY OR UNIQUE FEATURES AT A GREAT PRICE.



PRODUCTIVITY SOFTWARE

## FANTASTICAL 2 UPS THE ANTE FOR EVENTS IN OS X

BY GLENN FLEISHMAN

**AS APPLE'S CALENDAR APP** for iOS and Mac OS X moved across recent releases from inconsistent, inadequate, and irritating to more or less just fine, the market for replacements grew and matured. Fantastical for iOS, now in its second release, filled a gap. It doesn't just present a clean list and offer strong support for different calendar systems, it also has excellent natural-language processing. Type in a semblance of an event, and Fantastical would parse it and place it for you without fuss.

Fantastical's makers, Flexibits, brought a kind of snippet of Fantastical to OS X in its first version: a drop-down day view closely reminiscent of the iOS version. With the release of version 2, Fantastical on the Mac is now a full-fledged replacement for Apple's Calendar and a strong competitor to similar products. The previous version now appears as the Mini-Window, an optional system menu bar pop-down that gives a capsule view.

 MAC GEM

### FANTASTICAL 2



#### AT A GLANCE:

Fantastical isn't for everyone, but this update is a big step forward. A few tweaks to notifications and reminders, but it's already indispensable.

#### PROS:

- Natural language event entry
- Crisp view of events for the day and beyond
- Location-based calendar set context

#### CONS:

- Poor display of simultaneous events in week view
- Lack of time-scale of reminders
- Crisp view of events for the day and beyond

#### PRICE:

\$50

#### COMPANY:

[Flexibits.com/fantastical](http://Flexibits.com/fantastical)

The guiding philosophy for the program is that it's a calendar app that focuses on upcoming events in a list view, keeping that view active no matter whether you're looking at a graphical layout of day, week, month, or year. I live in the week view, and the combination of the upcoming list and a glance at the current week tends to work well together.

Fantastical can pick up existing accounts and calendars set in the Accounts system preferences pain, or stored locally or via Exchange, as well as let you manually add other iCloud, Google, Yahoo, and Fruux accounts, or any CalDAV-compatible calendar link.

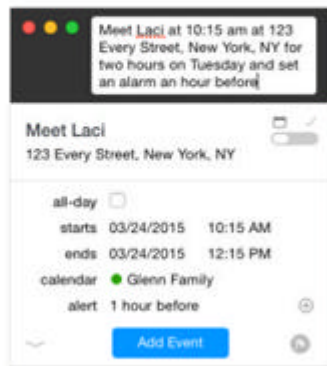
For me, its weak point is that it feels like a smartly designed events list with broader views attached, but for many users this may be its strength.

## SPEAK FREELY

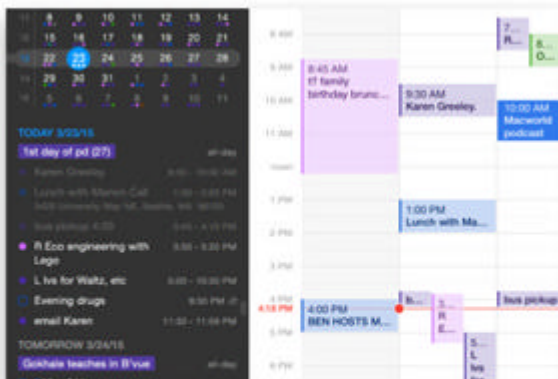
Flexibits has always stressed its natural-language aspect. It works as well or better in OS X than in iOS. (I've used the iOS version for years.) You can typically type a narrative sentence like, "Meet Laci at 10:15 am at 123 Every Street, New York, NY for two hours on Tuesday and set an alarm an hour before," press return, and you're done. The date is set by default to the current one selection; the address added to the location field; the end point figured out; and the alarm turned on.

This lets you include the kitchen sink when you make an appointment instead of needing to tap buttons and flip levers later, though those options are available to modify later. You can also add entries in the drag-and-release model on the calendar layout, but even then Fantastical takes your mouse movements and fills in the parameters related to them and moves the text-entry focus to its fill-in field.

The supported vocabulary is quite large, though it's easy to stump it. For instance, entering, "eat bitter greens every night at 8 pm" works just



**START TYPING** an address and Fantastical offers suggestions from Google Maps, including items you've stored there.



**FANTASTICAL 2** orients itself around its event list view, with the graphical datebook as a functional extra.

fine, but “eat bitter greens at 8 pm nightly forever” does not. Flexibits says it will be responsive to feedback and expand the vocabulary based on user requests, and even did so during the beta-testing phase.

Reminders have more limited parameters. You can preface your to-do sentence with “reminder” or “remind me to” or the like. If in the process of creating a reminder or event, you can click a switch to flip to the other kind of entry. That’s the one click you might find useful during item creation.

As with most mature software, Fantastical rewards you by experimenting or becoming a more sophisticated user. While it appears at first glance that you have to choose a calendar from the popup entry rather than type it in, Flexibits hit the shortcut of using a slash followed by the unique part of a calendar name—like “/Office public” — and the appropriate one appears in the calendar field for the entry in progress.

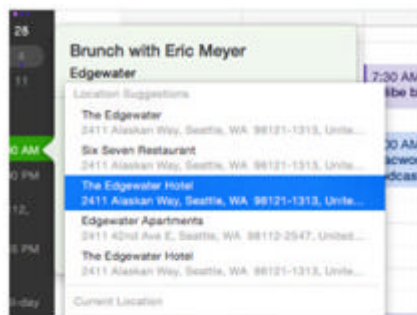
Or you might notice that days and times are entered in a literal format when you drag and drop, and thus enter the current date in full, like 4/1/15, to create an all-day event.

## WORK THE MOUSE AND KEYBOARD

An app that grew from an iOS sensibility definitely believes in minimizing the number of “touches” with a mouse. This generally works to its advantage. In the year view, for instance, often a somewhat wasted view in other calendar programs that provides too much information and too little functionality, Fantastical uses shading to indicate the intensity of a day from yellow (least) to red (most). Hovering over a day for a moment reveals a floating summary; clicking a day scrolls the list at left to that day’s activities.

Clicking an event in the list sidebar or in the Mini-Calendar list or double-clicking an event in the weekly or monthly view brings up an editable pop-over with the same options found when you initially create an event. This also appears when selecting an event in the day view, although in a separate right-hand pane.

In its drive to keep its approach clutter-free, options besides the basics are hidden while creating or when editing an event or reminder. Tapping a down arrow reveals items, such as invitees, URL, and notes, as well as time zone and repeat in the default area if they haven’t



**START TYPING** an address and Fantastical offers suggestions from Google Maps, including items you’ve stored there.

already been set for an event.

For frequent travelers, Fantastical supports fixed and floating time zones for events: the former used for events occurring at a specific time (an appointment or a flight) and the latter that should happen at a given time of day (such as taking a medication) regardless of zone. Enter a time zone in natural language or the word “float” or “floating” and Fantastical places it correctly.

Time zones are supported in reminders, but not floating times, and the time zone isn’t shown for reminders, though it is set correctly. The current time zone is derived from the system, but can be overridden in the Advanced preferences. I’ve found time-zone controls maddening in Apple and other apps; Fantastical has the best controls to set events, though it does lack a visual reminder in the list and datebook views that an appointment’s time is non-local.

**TIME ZONES ARE SUPPORTED IN REMINDERS, BUT NOT FLOATING TIMES, AND THE TIME ZONE ISN’T SHOWN FOR REMINDERS, THOUGH IT IS SET CORRECTLY.**

Flexibits uses Calendar Sets to manage which of your calendars appear. I’ve wound up with about 25 personal, family, hobby, and work calendars across seven accounts, and I typically don’t need to see all of them. Rather than constantly display a list of all calendar, active or otherwise, Fantastical offers a Calendars preference to build sets which can be selected among in a pop-up menu at the bottom of the list view. It goes further, too, by using geofencing to choose which set should appear when arriving or leaving at a set location.

While this is good in theory, in practice Flexibits needs to take it further, because it lacks a way to create a set of calendars that always displays or to duplicate a set. As a result, you have to re-create your choices every time you create a new one, even if the difference is a single calendar. I definitely miss the ability to toggle one calendar on and off, but I also appreciate that I use this so infrequently that I prefer having the screen space back for useful information I refer to all the time.

## **EVERY DAY, I REMIND MYSELF TO WRITE THE BOOK**

Fantastical still has room to grow. Its treatment of reminders puts them into a second-class citizen category, which may be appropriate for most

people, but doesn't match how I use them. Reminders that have a due-date attached appear in the list with a checkbox to mark them completed, along with exclamation points for higher-priority tasks.

However, you have to press *Command-R* to reveal all reminders, which flips the monthly calendar and list to show to-dos. The list is sorted by newest-to-oldest, then priority, then alphabetically. I'd prefer more granularity for dividing up future tasks and dragging undated items, but Fantastical's approach may suit other users just fine.

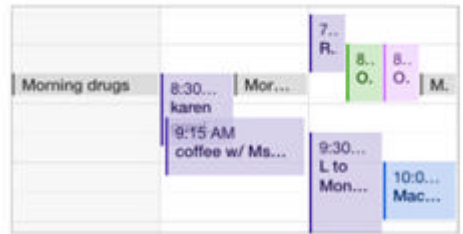
The weekly view is the one I tend to keep open at all times. Flexibits accounts for two or more simultaneous events occurring as with shared calendars. Other programs adjust an event's width or typeface dynamically to provide more of a cue. The company says that it will add a font-size option for views in a future release, but expects the left-hand list view to be consulted more frequently than labels on the datebook layout.

For a program that has a lot of synchronization options for calendars, it lacks one important one: you can't sync account information or other settings, like Calendar Sets, between multiple computers running Fantastical (I have two), or shared feature settings between iOS and OS X. This means setting up Fantastical from scratch on each device and, when a change occurs, managing it on each device as well. The company opted to not use iCloud for syncing, as it offers the software in the Mac App Store and directly as well, but there are many other sync options for these kinds of configuration details.

## A POWERFUL REPLACEMENT

Fantastical's overt simplicity and hidden depths may not be for everyone. But the company made distinct choices based on years of developing its iOS version and previous OS X release. Making design choices instead of throwing everything into the mix produces both good software and sharp contrasts—it's less likely to be for everyone, but more likely to serve quite well those who find the choices appealing.

If you find Fantastical's event-list centric approach, in which upcoming events are nearly to-do items alongside actual reminder entries, matches the way you want to manage your calendar, and the natural-language entry an appealing way to avoid adding events, it's the right program to pick. ■



**WHEN SIMULTANEOUS** events occur, Fantastical doesn't do a great job of making them visually legible.



You might know **Joshua**.  
He loves video games, and he  
owns enough to know they're not  
all meant for kids. That's why he  
reminds his friends (at least the  
ones that have kids) that they all  
have **big black letters on the box**  
to help parents find the ones that  
are best for their families.

You can learn about those  
ratings at **ESRB.org**



Los Angeles, CA



ENTERTAINMENT SOFTWARE  
RATING BOARD





UTILITY

## WHATSIZE: EASILY SHED FILES ON A BLOATED HARD DRIVE

BY GLENN FLEISHMAN

**MILLIONS OF FILES LURK** in your OS X installation, many of them useful! In an age of spinning hard-drive plenty, in which a 3-terabyte drive is cheap and fits in the space a 250GB or 500GB one did a few years ago, many of us are still constrained by the size of an SSD—or the irritation of a Mac model that has a hard drive that's nearly impossible to safely upgrade. WhatSize will help you figure out the mystery of what's filling your drive and give you both advice and tools to trim the fat.

WhatSize combines the functions of analysis and utility. Its analysis scans every file and folder on the disk and builds sortable, browsable, and visual directories. Its utilities can suggest files to remove. It all starts by selecting a drive in the Devices list: WhatSize goes about its indexing business or loads a previously completed scan.

 MAC GEM

### WHATSIZE 6.1.8



#### AT A GLANCE:

A serious competitor enters the fray against 1Password on the Mac desktop, but it has a long way to go to achieve true parity.

#### PROS:

- Password vault is available everywhere via website
- Offers better integration into browser fields

#### CONS:

- Clunky interface that behaves inconsistently and is un-Mac-like
- No way to create local-only password vault
- Crashes and unstable behavior during testing

#### PRICE:

Free; Optional \$12/year subscription for syncing.

#### COMPANY URL:

[whatsizemac.com](http://whatsizemac.com)

## TOOLS FOR ANALYSIS AND FILE MANAGEMENT

The analysis part is divided into Browser, Outline, Table, and PieChart.

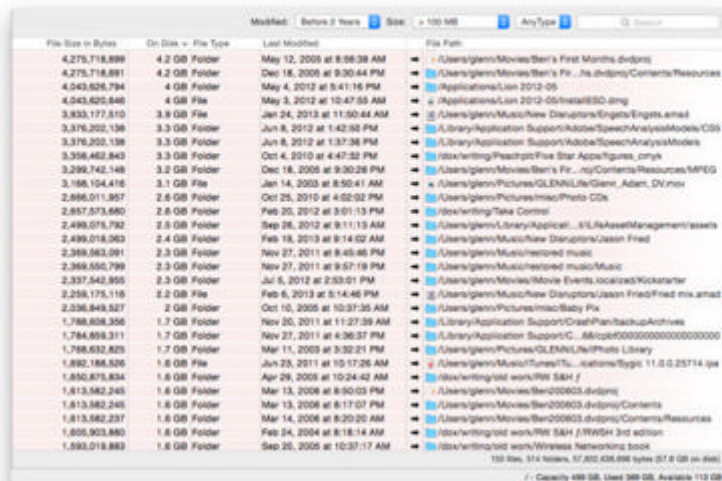
Browser and Outline correspond to the columns and views in the find. Table comprises every file and folder on a drive and can be sorted and filtered. For instance, you can find every file that's two years or older that occupies 100MB or more on your drive. This can help spot standout problems easily.

I found the PieChart view most immediately useful because it visualizes how storage is divided up into folders and files, and by clicking a pie segment, it lets you descend into folders. In this view, I discovered I had tens of gigabytes of old virtual machine (VM) snapshots that I'd never deleted, relating to a long-unused Windows XP VMware installation that I would never need to use again.

On the tools side, Cleaner, Delocalizer, and Duplicates have unique functions. The Cleaner shows you all the log files, caches, temporary files, and downloads, as well as "nib" files. Nibs are user-interface bundles that are often broken out by language. These can often, but not always, be deleted without affecting the application. Delocalizer identifies OS X resources that are required for other languages. In the past, such localization files could take up substantial space, but they were only a few megabytes for me.

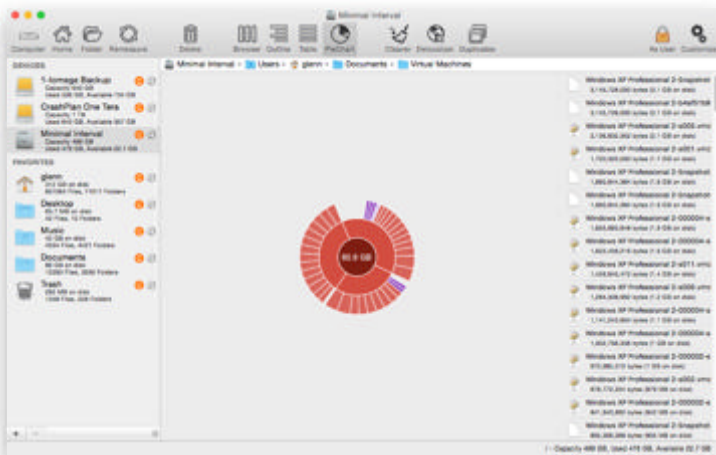
The most common tool you'll likely use is Duplicates. When WhatSize creates its file list, it makes a short-hand signature of every file's contents,

**FIND JUST FILES,**  
folders, or both that  
meet filter criteria.



File Size in Bytes	On Disk	File Type	Last Modified	File Path
4,275,718,899	4.2 GB	Folder	May 12, 2005 at 8:58:38 AM	~/Users/glenn/Movies/Ben's First Months.dvdproj
4,275,718,891	4.2 GB	Folder	Dec 18, 2005 at 9:30:44 PM	~/Users/glenn/Movies/Ben's Fir...dproj/Contents/Resources
4,543,626,794	4 GB	Folder	May 4, 2012 at 9:41:16 PM	~/Applications/Lion 2012-05
4,543,626,846	4 GB	File	May 3, 2012 at 10:47:55 AM	~/Applications/Lion 2012-05/metalESD.img
3,853,177,810	3.9 GB	File	Jan 24, 2013 at 11:50:44 AM	~/Users/glenn/Music/New Directions/English/English.amid
3,376,202,136	3.3 GB	Folder	Jun 8, 2012 at 1:42:32 PM	~/Library/Application Support/Adobe/SpeechAnalysis/CS6
3,376,202,136	3.3 GB	Folder	Jun 8, 2012 at 1:37:34 PM	~/Library/Application Support/Adobe/SpeechAnalysis/Models
3,358,462,843	3.3 GB	Folder	Oct 4, 2010 at 4:47:32 PM	~/Box/whiting/Peachpit Five Star Apps/Tunes_cmyk
3,299,742,148	3.2 GB	Folder	Dec 18, 2005 at 9:30:28 PM	~/Users/glenn/Movies/Ben's Fir...nj/Contents/Resources/MPEG
3,186,104,416	3.1 GB	File	Jan 14, 2003 at 8:50:41 AM	~/Users/glenn/Pictures/GLENN/Life/Glenn_Adam_DV.mov
2,895,011,957	2.9 GB	Folder	Oct 25, 2010 at 4:52:02 PM	~/Users/glenn/Pictures/mia/Photo CD's
2,857,573,850	2.9 GB	Folder	Feb 25, 2012 at 9:01:13 PM	~/Box/whiting/Take Control
2,498,075,792	2.5 GB	Folder	Sep 26, 2012 at 8:11:13 AM	~/Users/glenn/Library/Applicati...s/Library/Management/assists
2,498,075,792	2.4 GB	Folder	Feb 18, 2010 at 9:14:02 AM	~/Users/glenn/Music/New Directions/Lion Fire.d
2,349,583,091	2.3 GB	Folder	Nov 27, 2011 at 8:45:48 PM	~/Users/glenn/Music/restored music
2,349,583,091	2.3 GB	Folder	Nov 27, 2011 at 9:57:19 PM	~/Users/glenn/Music/restored music/Music
2,337,542,955	2.3 GB	Folder	Jul 5, 2012 at 2:53:01 PM	~/Users/glenn/Movies/Movie Events.localized/Vickstar
2,259,175,116	2.2 GB	File	Feb 6, 2013 at 5:14:46 PM	~/Users/glenn/Music/New Directions/Jason Fried/Find mia.amid
2,356,949,337	2 GB	Folder	Oct 16, 2008 at 10:37:35 AM	~/Users/glenn/Pictures/mia/Busy Pix
1,788,858,256	1.7 GB	Folder	Nov 20, 2011 at 11:27:39 AM	~/Library/Application Support/CD's/Backup/Archives
1,784,858,311	1.7 GB	Folder	Nov 27, 2011 at 4:36:37 AM	~/Library/Application Support/C...Apple6500000000000000000000
1,769,632,825	1.7 GB	Folder	Mar 11, 2003 at 3:32:21 PM	~/Users/glenn/Pictures/GLENN/Life/Photo Library
1,692,186,526	1.6 GB	File	Jun 25, 2011 at 10:17:26 AM	~/Users/glenn/Music/Tunes/Tu...cations/Type 11.0.0.25714.jpg
1,650,875,834	1.6 GB	Folder	Apr 26, 2008 at 10:24:42 AM	~/Box/whiting/old work/RW S&H .f
1,613,582,245	1.6 GB	Folder	Mar 13, 2008 at 8:50:03 PM	~/Users/glenn/Movies/Ben/200803.dvdproj
1,613,582,245	1.6 GB	Folder	Mar 13, 2008 at 8:17:07 PM	~/Users/glenn/Movies/Ben/200803.dvdproj/Contents
1,613,582,237	1.6 GB	Folder	Mar 14, 2008 at 9:20:20 AM	~/Users/glenn/Movies/Ben/200803.dvdproj/Contents/Resources
1,605,903,880	1.6 GB	Folder	Feb 24, 2004 at 8:18:14 AM	~/Box/whiting/old work/RW S&H J/WW&H 3rd edition
1,593,018,893	1.6 GB	Folder	Sep 25, 2005 at 10:37:17 AM	~/Box/whiting/old work/Wireless Networking book

150 files, 314 folders, 17,810,436,696 bytes (517.0 GB on disk)  
Capacity 499 GB, Used 389 GB, Available 110 GB



### WHATSIZE'S PIE

Chart revealed to me graphically how outdated virtual machines snapshots had filled up my drive.

and uses that to identify identical files, disregarding system metadata and the file name. This is useful. If you had a 5GB movie that you copied and renamed, a tool that matched only name and file size would miss its duplicate status. Conversely, 1000 files called Image1.png would appear to be duplicates by file name, even if each file contained a unique image.

The Duplicates feature lets you instantly delete a file or move it to the

The screenshot shows the 'Duplicates' window in WhatSize. It displays a table with columns for file name, size, original file, duplicate status, last modified date, and relative file path. The table lists several duplicate files, including images, videos, and audio files. The status bar at the bottom indicates a capacity of 489 GB, with 389 GB used and 100 GB available.

File Name	Size	Original	Duplicate	Last Modified	Relative File Path
julia_groceries_bike.jpg	3.9 MB	original		Jun 14, 2013 at 1:56:07 AM	/Users/glenm/Photos/...julia_groceries_bike.jpg
101-0105_MVI.avi	3.8 MB	original		Jul 22, 2002 at 5:38:45 PM	/Users/glenm/Photos/...101-0105_MVI.avi
14-54a rotate.tif	3.8 MB	original		Feb 9, 2004 at 12:40:54 PM	/Users/glenm/Photos/...14-54a rotate.tif
10-It's Kickin' in.mpg	3.8 MB	original		Jun 29, 2009 at 11:05:08 AM	/Users/glenm/Photos/...10-It's Kickin' in.mpg
100-0028_MVI.avi	3.8 MB	original		Jul 22, 2002 at 5:38:45 PM	/Users/glenm/Photos/...100-0028_MVI.avi
101-0105_MVI.avi	3.8 MB	original		Jul 22, 2002 at 5:38:45 PM	/Users/glenm/Photos/...101-0105_MVI.avi

### WHATSIZE DUPLICATES

tool finds multiple copies of the same file, sometimes named differently, but identified as matches.

Trash. Even with the Admin setting enabled (click the lock and enter an administrative password), WhatSize won't let you trash files directly that fall outside the Users directory, lest you kill a file critical to OS X's normal functioning.

**IF YOU FIND YOURSELF SQUEEZED REGULARLY, OR WANT A GREAT ONE-TIME BLAST, WHATSIZE FITS THE BILL WITH SMART, EASY SCANNING AND FILE CLEANUP.**

You can also opt to replace a duplicate with a hard link, a feature that's used by Apple to create Time Machine backup directories. A symbolic or soft link is a kind of redirection, like an alias in the Finder. A hard link works in the filesystem just as if a copy of the data were in the same place, which ensures that programs or projects don't fail if you de-duplicate. Multiple hard links can point to a single data file.

## **SCAN IN THE PLACE WHERE YOU WORK**

In testing the software on a crowded 500GB drive that had roughly 25GB free, I was rapidly able to remove the aforementioned virtual-machine snapshots and a host of large and medium-sized duplicates, shedding over 90GB and giving myself some breathing room.

One major warning: It took more than a full workday to perform the initial analysis on my mid-2011 Mac mini (16GB RAM), often slowing down other operations. There's no way to pause a scan in progress, though you can quit the program. In my testing, quitting halted the process, but relaunching left it in an incomplete state, and the Remeasure option appeared to start all over again. An Activity Monitor will at least show you the progress.

Its greatest flaw isn't functionality, but price: Is it worth \$30 for what might be a one-time task? Yes, if you frequently find yourself with a filling drive and no explanation, or need to remove duplicates on a regular basis. Standalone de-duplicators work the same and cost less, but lack the visualization and other lists and tools.

## **BOTTOM LINE**

I'm sure I'll come back to WhatSize on this system repeatedly, as I have nearly filled the drive before, have previously used Spotlight in a Finder window to search for large files, and have manually hunted for duplicates. If you find yourself squeezed regularly, or want a great one-time blast, WhatSize fits the bill with smart, easy scanning and file cleanup. ■



## SECURITY

# LASTPASS FOR MAC PROTECTS PASSWORDS BUT NEEDS POLISH

BY GLENN FLEISHMAN

**THE GOLD STANDARD FOR PASSWORD VAULTS** on the Mac is 1Password. Now in its fifth major release, 1Password has matured along with its userbase. One of its most stalwart longtime competitors, LastPass, has had an iOS version, but OS X customers have had to work through browser plug-ins or its website, putting it at a disadvantage.

The release of the free LastPass for Mac puts the two popular secrets-protection packages head to head. And LastPass comes out reasonably well in aspects of the comparison: The two apps carve out different spaces, which will vary in importance by users' specific security preferences and access needs. But in most respects, LastPass feels unfinished and clunky—a work in progress that works, but needs more work. The Mac version is free. A \$12-per-year subscription adds mobile app synchronization, hardware-based and biometric two-factor login support, and a family-based secure password sharing option.

## LASTPASS FOR MAC

**AT A GLANCE:**

A serious competitor enters the fray against 1Password on the Mac desktop, but it has a long way to go to achieve true parity.

**PROS:**

- Password vault is available everywhere via website
- Offers better integration into browser fields

**CONS:**

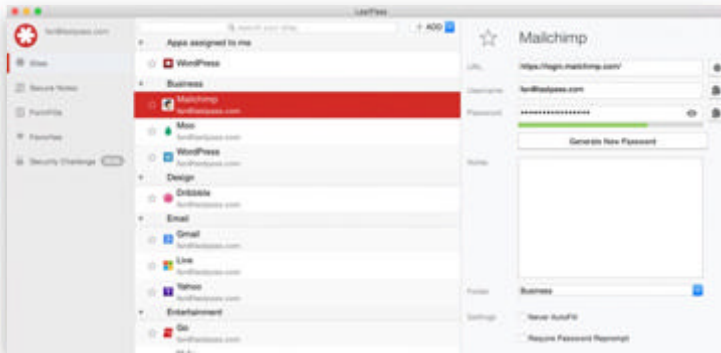
- Clunky interface behaves inconsistently and is un-Mac-like
- No way to create local-only password vault
- Crashes and unstable behavior during testing

**PRICE:**

Free. Optional \$12/year subscription for syncing.

**COMPANY:**

[lastpass.com](http://lastpass.com)

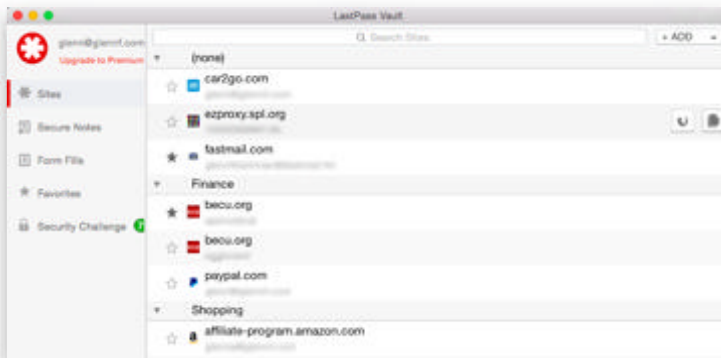


**LASTPASS IS** a popular solution for iOS, but this is its first official Mac app.

## ACCESS YOUR PASSWORDS ANYWHERE

The central theme of LastPass is accessibility everywhere: Your passwords are stored in a local vault on your Mac (or other platforms) and always synced with LastPass's storehouse. This has the advantage that you can log into the LastPass website to access passwords anywhere and the disadvantage that anyone with your credentials can log into the LastPass website to access your passwords anywhere.

Having direct access with a login increases the “risk surface,” although you can mitigate that with a premium subscription by using one of several two-factor authentication methods it supports, including Yubikey (a USB key generator) and Google Authenticator to prevent logins without possession of or access to a unique second verification code or device. (LastPass syncs via Dropbox and iCloud Drive, but doesn't allow access to its encrypted vaults without syncing to a local copy and using its software.)



**THE VAULT WINDOW** in the new Mac app is a stripped-down version of what's available at the Web site, (Account names are blurred.)



The new Mac app feels more like a better extension of the plug-ins than a fully freestanding app, but it gets the job done. The Mac app is primarily the Vault window, a locally synchronized and updated version of the data stored in your LastPass web account. The Vault offers access to site logins, secure notes, and “form fills”—the company’s term for identities that can contain credit-card information, an address, and more. But you can’t generate passwords on their own in the Vault window, even though you can in the browser plug-ins.

The site login seems quite primitive compared to 1Password, only storing a username and password, where 1Password can capture all form elements and store previously used passwords among other features. The FormFill feature puts different categories of items in a single profile. To define multiple credit cards, you have to create a profile for each, and there’s no duplicate option to avoid re-entering address and other personal data.

The Vault pseudo-app’s menus are almost empty, and there’s no way to customize the way in which entries are shown. Choosing Undo after creating a new entry crashed the app. Buttons in the Vault and other dialog boxes are odd—like they belong on another platform, but which one? I’m not sure.

The browser plug-ins are better designed and seem more mature, although they also have a very technical feel and are rather chatty. When logging into a site, the plug-in alerts you about using a stored login and also displays an overlaid box on the page that says a page is loading, and then that it’s loaded and the login data has been submitted.

Applicable form fields have the LastPass asterisk icon in them, which you can click to bring up matching entries or perform other tasks. After manually entering or using a browser-stored account login, LastPass shows a subtle but persistent bar along the page’s top offering to store the login, as well as temporarily or permanently ignore it.

**THE NEW MAC APP FEELS MORE LIKE A BETTER EXTENSION OF THE PLUG-INS THAN A FULLY FREESTANDING APP, BUT IT GETS THE JOB DONE.**

### **A LITTLE MORE POLISH, PLEASE**

In testing, the app seemed unfortunately unstable. Fine for long periods, it would sometimes cycle through logins, logging itself out and then,

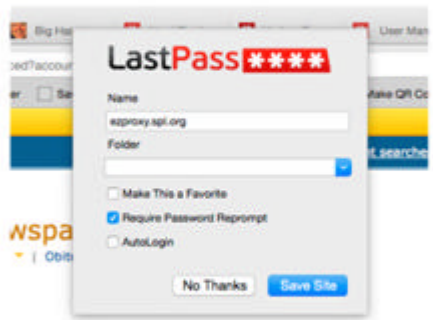
when logged back in, launching the vault window and pushing it foremost in OS X. This seemed to affect syncing as well. There are polish problems all over: Form fill is sometimes called FormFill, sometimes Form Fill, and sometimes (lowercase) form fill.

The app has the surface feeling of ported software, instead of a native OS X program. This starts with the menu options. After installing, you can launch it, which opens the Vault window, but closing the window removes the app's icon from the Dock. A menu bar item is persistent, from which you can select Vault. Choosing Preferences from the menu or from the Preferences item that appears and then clicking Cancel bafflingly closes the Vault.

From a security standpoint, after an interval you specify has passed during which the vault remains unlocked, a master password request appears. However, it comes up without blanking the vault main display, allowing account names and other information to be viewed, unlike 1Password, which secures the display when the timeout occurs.

## BOTTOM LINE

LastPass for OS X isn't ready for general use without additional polish, user-interface design, and debugging. It does store and fill in site logins as promised, but unless you need its web-based access or already use LastPass via plug-ins or mobile apps, I cannot recommend its use yet. ■



**AFTER CLICKING** Save Site in the LastPass bar, you can tweak details before it's added to the vault.



## GADGETS

## ACCELL'S POWERGENIUS: A SMARTER SURGE PROTECTOR

BY MICHAEL BROWN

**IN AN IDEAL WORLD**, every power adapter would be an in-line brick with its plug on the end of a pigtail. Until we realize that world, Accell's PowerGenius surge protector might be the next best thing.

It seems like no matter how the outlets on the typical outlet strip are oriented, you always wind up with one or more adapters blocking an adjacent plug and rendering it useless. Not this one. Each of the PowerGenius's six outlets rotates 180 degrees so that no matter how large of a wall wart you plug into it, the next outlet won't be blocked. In addition to its six outlets, the strip has two USB charging ports that can deliver 5 volts and 2.4 amps directly to a USB device—no adapter needed.

The two ports share that power, however; the port labeled "tablet" can deliver a maximum of 2.4 amps, while the port labeled "phone" can deliver a maximum of 1.0 amps. Plug in two phones that draw 1.0 amp each, and the strip can charge both at full speed. Plug in a phone drawing 1.0 amps and a tablet drawing 2.4 amps at the same time, and Accell estimates the strip will charge both devices 55 percent as fast. If you don't need the USB feature, Accell also offers a less-expensive model that has 7 outlets but no USB ports.

The rest of PowerGenius's features are pretty standard fare: The strip comes with a six-foot grounded cable, and it has a red LED to indicate when it's properly grounded and a green LED to indicate

### ACCELL POWERGENIUS



#### AT A GLANCE:

Powergenius' rotating outlets on Model D0808-025K are an ingenious solution to the problem of one power adapter blocking adjacent outlets.

#### PROS:

- No single power adapter blocks another outlet
- Dual USB charging ports
- 6-foot power cord

#### CONS:

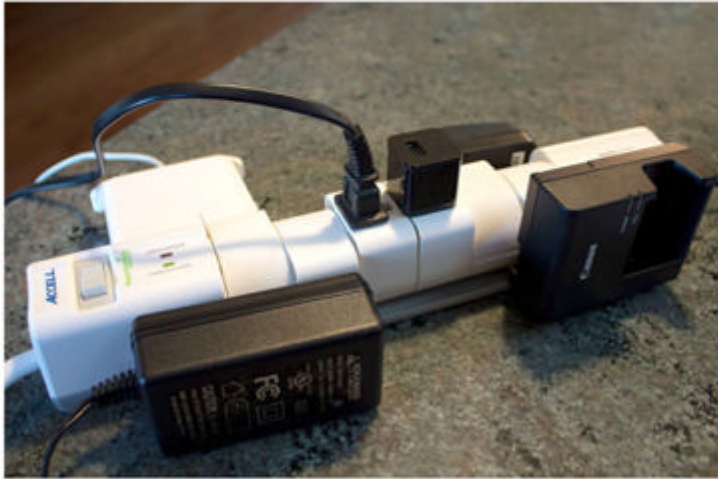
- Master power switch could be better located
- Can be mounted to the wall, but not clamped to a work surface

#### PRICE:

\$30

#### COMPANY:

[accellcables.com](http://accellcables.com)



**ALL SIX OF** the surge suppressor's outlets, can be used even when several oversized power adapters are plugged in.

when it's delivering active protection. It's equipped with a 15-amp circuit breaker that will shut the power strip down if a connected device malfunctions or total power draw exceeds its 1800-watt capacity.

The MOVs (metal-oxide varistors) that enable the PowerGenius to protect connected devices from power surges are encased in a fireproof material that prevents them from igniting in the event of a massive power surge. Once the strip is no longer capable of absorbing power surges, it will cease to conduct power to its outlets to protect connected devices.

The PowerGenius is a pretty terrific surge suppressor, but two features found on the Tripp Lite TLP606DMUSB would make it even better: A set of sturdy clamps to secure it to the edge of your work surface, and locating the master toggle switch on the end of the strip—where the power cord emerges—instead of the top. The switch is somewhat recessed in its present location, but I did depress it unintentionally and turn the strip off while I was plugging a power adapter into the closest outlet.

I can't say those two criticisms are more important than the rotating outlets, however; they're a fabulous idea. ■

# Hot Stuff

What We're  
Raving About  
This Month



## OWC THUNDERBOLT 2 DOCK

The new single-port MacBook has us dreaming of a slick USB-C dock, but great docks for Thunderbolt Macs are already here. OWC's newest Thunderbolt 2 Dock ([macsales.com](http://macsales.com)) sports 12 connectivity ports: dual Thunderbolt 2, five USB 3.0, FireWire 800, HDMI (with support for 4K), gigabit ethernet, and audio-in and -out. For \$250, you'll never run out of ports again. —**SUSIE OCHS**



## **ELGATO THUNDERBOLT 2 DOCK**

Elgato's Thunderbolt 2 Dock ([elgato.com](http://elgato.com)) undercuts the competition with its price of \$230 (including a cable!), and it puts one USB 3.0 port, plus inputs for your headphones and microphone on the front. On the back you'll find gigabit ethernet, two more USB 3.0 ports, and two Thunderbolt 2 ports, plus HDMI. A menubar utility lets you eject all drives plugged into the dock with one click, a nice touch. —**SUSIE OCHS**

# Hot Stuff

What We're  
Raving About  
This Month




## **KANEX THUNDERBOLT 2 EXPRESS DOCK**

Kanex Thunderbolt 2 Express Dock

The \$250 Thunderbolt 2 Express Dock from Kanex ([kanex.com](http://kanex.com)) helpfully locates one of its three USB 3.0 ports on the front, perfect for charging your iPhone or iPad. On the back you'll find two Thunderbolt 2 ports, HDMI with 4K/dual display support, the other two USB ports, gigabit ethernet, and audio-in. A 1-meter Thunderbolt cable is included too. —**SUSIE OCHS**





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TEACH 





## ResearchKit helps iPhone users participate in medical research

Apple's new software framework is poised to revolutionize medical study participation.

BY FRED O'CONNOR

**A**pple thinks its new software framework can solve some of the biggest challenges facing medical researchers, including recruiting people for studies and collecting health data more frequently.

Called ResearchKit, the framework will allow developers to create apps for medical research studies that turn a smartphone into a diagnostic tool, Apple said during an event in San Francisco. ResearchKit ([apple.com/researchkit](http://apple.com/researchkit)) will be released as open source in April and the first five apps are available now, said Jeff Williams, Apple's senior vice president of operations. Because it's releasing ResearchKit as open source, apps can be developed for mobile platforms other than iOS, such as Android.

Apple teamed up with several hospitals to develop the initial apps, said Williams. Massachusetts General Hospital helped create an app for diabetics and Mount Sinai Hospital in New York City worked on an app for asthma patients. Other apps involve studies dealing with cardiovascular disease, breast cancer and Parkinson's disease.

The apps allow smartphone users to participate in medical research experiments. The app for Parkinson's disease, for example, runs a test that uses a phone's gyroscope and accelerometer to measure a person's gait. Another test run by

the app measures hand tremors by having a person tap on a phone's screen. Parkinson's disease affects the nervous system and impacts a person's ability to move. Tremors are a symptom of the illness.



**WITH PERMISSION,**  
data can be  
collected by an  
app throughout  
the day.



**RESEARCHKIT WAS INTRODUCED** during a press event in March with Jeff Williams, Apple's senior vice president of operations. The first five apps are available now.

With a person's permission, ResearchKit also accesses medical data that's collected from an iPhone, Apple Watch and apps developed with the HealthKit software framework.

Apple will not see any of the health data the apps collect and people decide what experiments they want to participate in and how

they want to share information.

Disease symptoms change constantly and using the data collected from a smartphone can give doctors more frequent and accurate data, Williams said. ResearchKit will allow for large-scale medical studies and give health care providers access to greater cross-sections of the population, he said. ■

I was one of the **1** in **5**  
Children in America who  
**STRUGGLE WITH HUNGER**  
join me and help put an  
End to childhood hunger.

Viola Davis

**HUNGER IS  
ALL OF US**

**HELP UNDO CHILDHOOD HUNGER. GO TO [HUNGERIS.ORG](http://HUNGERIS.ORG)**

THE  
**SAFeway**  
FOUNDATION

The *Hunger Is* campaign is a collaboration between The Safeway Foundation and the Entertainment Industry Foundation to raise awareness and improve the health of hungry children.

**EIF**  
ENTERTAINMENT INDUSTRY FOUNDATION

The Safeway Foundation and the Entertainment Industry Foundation are 501(c)(3) tax-exempt organizations. Photo by: Nigel Parry



**VIDEO**

To view this video, go to [go.macworld.com/bloatriskvid](https://go.macworld.com/bloatriskvid)

IDG.tv

# Feature bloat puts Apple Watch's sublime simplicity at risk

Can a neverending list of features thrive on a 390-pixel display?

BY JON PHILLIPS

If I were Tim Cook right now, I wouldn't be worrying about Apple Watch sales potential. Oh, it will sell. The new TV spot is inspiring, and the stainless steel polish on these watches looks fan-frigging-amazing. Add in Apple's trademark surprise-and-delight, and all signs point to long lines on launch day.

---

I'd be more concerned about people using the Watch than buying the Watch packed silly with features—far too many of them borrowed from the catalog of smartwatch failures.

A troubling number of smartwatch owners eventually toss their gadgets aside. The most detailed data on this problem, a July 2014 Endeavor Partners study ([go. macworld.com/wearablestudy](http://go.macworld.com/wearablestudy)), tells us that about a third of all smartwatch and fitness band owners abandon their wrist wearables after six months.

Poor battery life certainly contributes to attrition rates. Aside from the Pebble, you need to put nearly all smartwatches in their charging cradles before you go to bed. Forget to do so once, and you blame yourself. Forget to do so twice, and you blame the watch. Forget to do so

thrice, and you begin losing interest entirely.

The Apple Watch battery is rated for 18 hours, so users will need to be vigilant about recharging. Trust me: I've

been reviewing smartwatches since they became a thing, and once you run out of juice the first time, you're already on the path to giving up. It's a secondary device. It's not essential like your phone. So giving up is easy.

But the Apple Watch faces exposure to an even bigger problem: feature bloat. It's an issue that plagued Samsung's Galaxy Gear, and now, inexplicably, Apple is following Samsung down

the same dangerous path.

Just because you can add a feature doesn't mean you should add a feature. Yet recently, Apple confirmed that the Watch will allow voice calls



**DOES A SMARTWATCH**  
really need a full suite  
of fitness features?  
Certainly not if they  
just add to the noise.

from your wrist, just like Samsung's Gear, an ambitious but seriously flawed smartwatch pioneer. The Gear's speaker is too weak and tinny to cut through wind and crowd noise. It's a mission-defining parlor trick that breaks your heart.

Have Apple's engineers made good on Samsung's broken promise? We'll know soon enough. But simply copying Samsung's Dick Tracy schtick is alarming. The world's cruel pundits don't really care about Samsung, and none of them will ever remember the Galaxy Gear. But if Apple's voice calls fail us, you'll hear about it on the DailyMail, Saturday Night Live, and your local evening news.

Then there's the Apple Watch's heart rate glance, which shows your heart's beats-per-minute whenever you initiate a spot check. It's a

ubiquitous feature on all Samsung watches, and you'll also find it on every Android Wear watch. But it's



**WEARABLES LIKE** the Samsung Gear Fit only taught us that heart rate spot checks are a checklist item, and not much more.

also essentially useless, as none of these watches' heart rate sensors can provide accurate real-time readings during the jumping and jostling of physical exercise.

I suspect about 98 percent of all Android users will

tell you they never use their smartwatch's heart rate feature. For this reason alone, Apple has diminished its essential brand promise by including this frivolous, me-too feature as well. It's noise, not utility. It's bloat, not function. (And, no, don't tell me that

Apple will offer real-time heart-rate data during workouts. It's an extremely difficult sensor trick to pull off, and if Apple offered it, it would already be a top-line promise.)

I'm cherry-picking two very obvious copycat features, but the Apple Watch is



**FEATURES LIKE** door unlocking are new and fresh, and offer a serious point of differentiation with the smartwatch past.

packed with many more, from mail alerts to workout programs to mapping directions to even generous



**...WHILE YOU MIGHT BUY THE UPCOMING APPLE WATCH, YOU MAY NOT BUY ITS SECOND-GEN FOLLOW-UP IF YOU FEEL YOU DIDN'T GET YOUR MONEY'S WORTH, OR SOME BORDERLINE FEATURES JUST DIDN'T WORK.**

support for third-party apps. You could argue that some smartwatch features are must-haves, that a smartwatch isn't a smartwatch unless these features are present and accounted for. But the problem: Smartwatches have not been a resounding success.

So why emulate mediocrity? I think a much stronger Apple Watch would offer simple notifications, Passbook with built-in Apple Pay, HomeKit integration, and a full suite of time-keeping and personal messaging functions. In other words: all Apple, all the time. Addition via subtraction. Give users a relatively small set of exquisitely engineered and incontrovertibly useful features, and then drop the mic.

Of course, once you get your Apple Watch, you can choose to use just a short list of features and ignore the ones that don't appeal to you. You may find that a watch that tells the time, pays for coffee, opens doors, and sends haptic heartbeats to loved ones is all you ever need. Indeed, Apple's small, ostensibly trivial surprise-and-delight tricks (taps, sketches, stickers, and custom animated emojis) might be all the Watch requires to be a

resounding success.

But there's still something psychologically deflating about a watch—or any product—that's jam-packed with stuff you never use. You begin to question whether you're getting your full money's worth. It's like dropping \$60 for a Las Vegas buffet, getting way too full on \$20 of crab legs, and wondering what just happened.

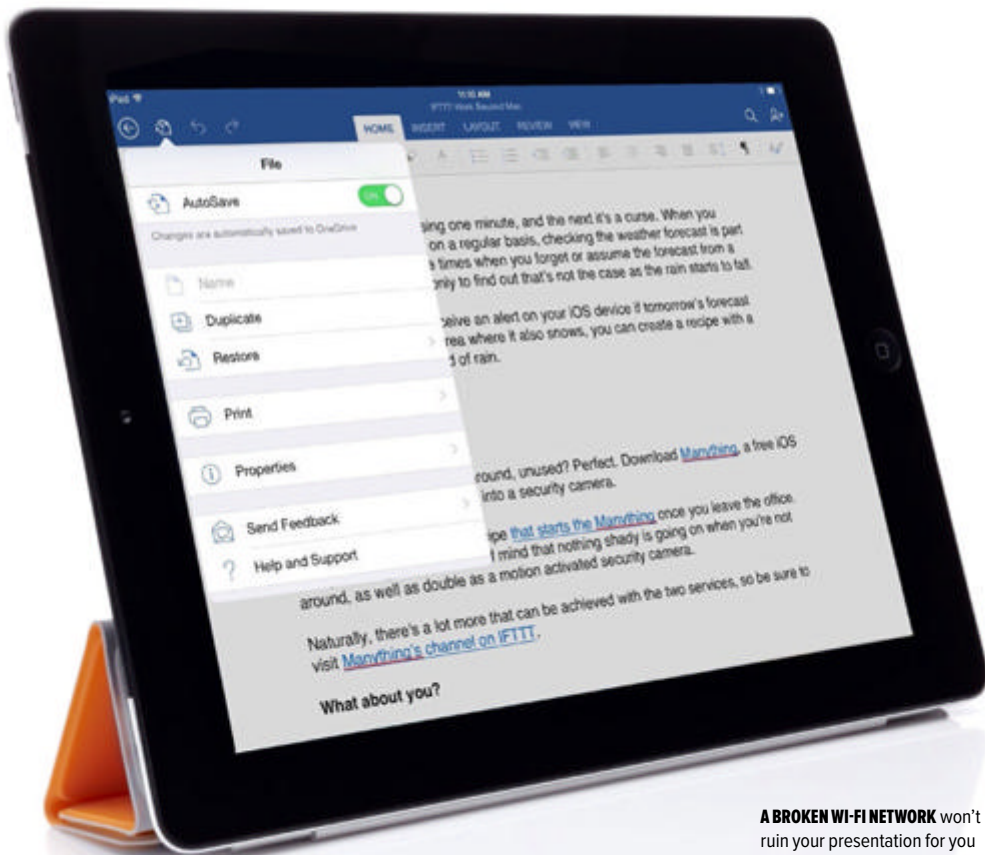
We will never hold our computers and smartphones to the stringent requirements we ask of smartwatches. We have to have a computer and phone. But a smartwatch? Probably not. So while you might buy the upcoming Apple Watch, you may not buy its second-gen follow-up if you feel you didn't get your money's worth, or some borderline features just didn't work. And that's not just bad news for Apple. It's bad news for Samsung, LG, Motorola, and all the other mobile companies looking for salvation in an entirely new product category.

Now we can only wait and see if it's solved all of its competitors' problems, or overreached by playing its competitors' game. ■



# 7 time-saving tips and tricks for Office for iPad

BY JASON CIPRIANI



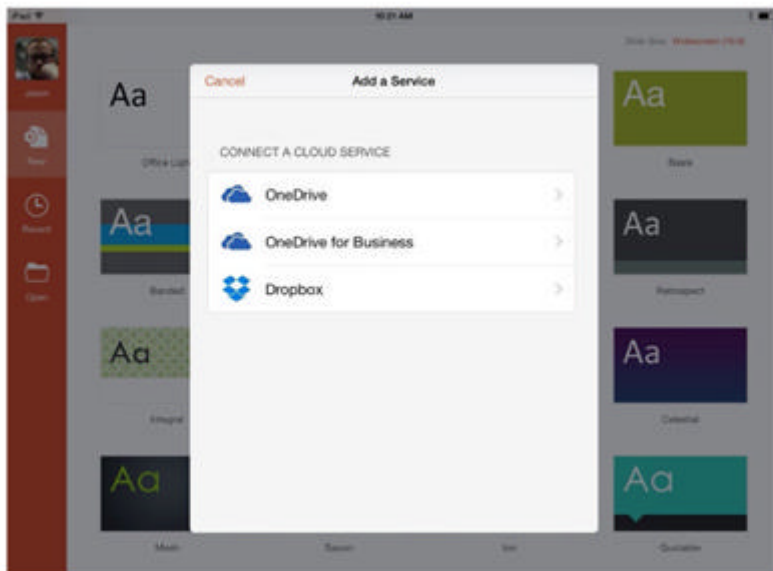
**A BROKEN WI-FI NETWORK** won't ruin your presentation for you if you backup the document to your iOS device.

**N**ot too long ago using Microsoft's Office apps on any iOS device was nothing more than a far-fetched dream. Then the team in Redmond rocked the iOS world by releasing its Office suite for the iPad. There was a glaring issue with it, however, in the fact you could only view documents for free. To edit existing documents or create new ones, you needed to shell out for an Office 365 account.

Then in November, Microsoft surprised everyone once again by releasing an update that made editing documents part of the free set of features. Since then, I've spent plenty of time kicking the tires of the suite on my iPad and iPhone and learned some helpful tips for boosting your mobile productivity.

### **ADD YOUR DROPBOX ACCOUNT**

Dropbox and file sharing go hand in hand. Naturally you'll want to access your Dropbox files within Word, Excel, or PowerPoint. There are two easy methods for connecting Office to Dropbox. Either tap your profile picture, then Add a Service; or tap the



**CHOOSE FROM** two methods to add your Dropbox account to an iPad.

Open tab on the left side of the screen, then Add a Place. Select Dropbox from the list in either place, and grant permission for the app to access your files.

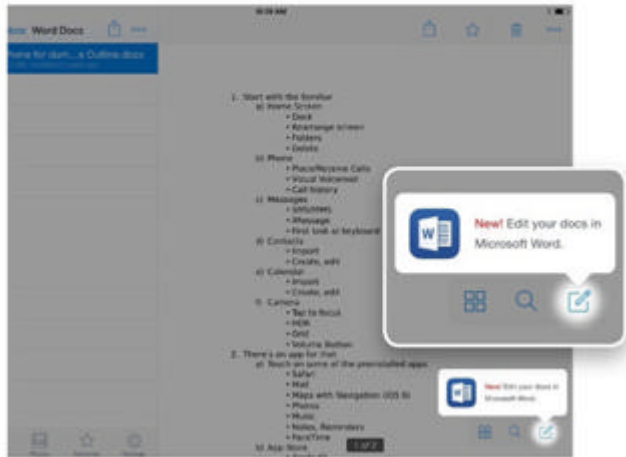
It's important to note you'll need to do this with each Office app you plan on using with Dropbox.

## OPEN FROM DROPBOX, EDIT IN OFFICE

You can even start from the Dropbox app: While browsing your files there, you can send them to the Office apps for editing. Just open an Office-compatible document for viewing, and then tap the Edit button in the lower-right corner. The document opens in its proper app, and you can make changes and then save it right back to your Dropbox account.

## KEYBOARD SHORTCUTS

One thing I love about using an external iPad keyboard is taking advantage of the same keyboard shortcuts I know and love on my Mac. Office for iPad has plenty, and Microsoft has lists for Word ([go.macworld.com/shortword](http://go.macworld.com/shortword)), Excel ([go.macworld.com/shortexcel](http://go.macworld.com/shortexcel)), and PowerPoint ([go.macworld.com/shortpp](http://go.macworld.com/shortpp)). Take a while to peruse them, but they should immediately seem familiar—cut, copy, paste, select all, and undo are among the shortcuts that will immediately speed up your workflow.



You'll even find shortcuts for navigating your documents using, say, Option and the arrow keys, for example, to move the cursor up and down by a paragraph in Word. It might seem weird at first to navigate with the keyboard's arrow keys when you could just reach out and touch the iPad's screen. But if you're used to reaching for these shortcuts on your Mac's external keyboard, using them on your iPad's external keyboard will have you feeling right at home.

**TAP THE ICON** in the bottom right of the Dropbox window to edit a document in Office

## SAVE LOCAL COPIES

Storing a document in the cloud is fine and dandy, so long as you know you're going to have a data connection of some sort. If you have a big presentation coming up, don't let something like a broken Wi-Fi network ruin it for you. Save the document to your iOS

device as a backup.

To do this, while viewing the file you want to save, tap on the document icon with the two arrows making a circle. It's what I consider to look like a refresh icon. From the list of options, select Duplicate, then choose your device from the list of storage options.

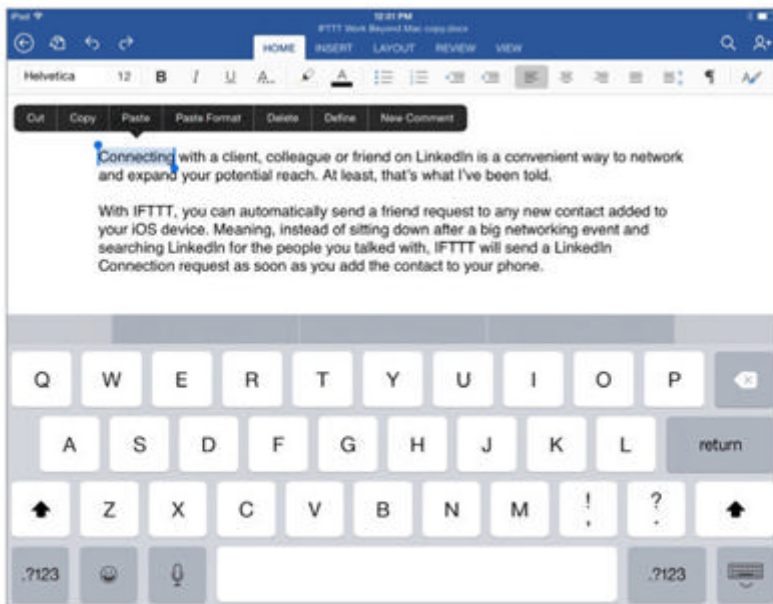
## AUTOFILL IN EXCEL

Typing a long list of repetitive dates, numbers, etc.—repetitive anything, really—into your Excel spreadsheet is a hassle. Thankfully, the time-saving Autofill feature from the desktop

**TYPING A LONG LIST OF REPETITIVE DATES, NUMBERS, ETC—REPETITIVE ANYTHING, REALLY—INTO YOUR EXCEL SPREADSHEET IS A HASSLE.**

version has made it into Excel on iOS.

Start by filling in the first two cells, setting the pattern for Excel to understand. Then highlight the two cells, bringing up the copy menu where you'll find the Fill option. Tap on it, then drag the proper arrow in the direction you'd like to continue the sequence. When you lift up your finger, the cells are filled automatically.



## MATCHING FORMATS

is a tap away in the Office for iPad.

## MATCH FORMATTING

Even when an app is touch-optimized, repeating tasks can be a bit taxing and tedious, and that definitely includes trying to match formatting between sections of your document.

Start by highlighting a block of text with the format you want to reproduce, and tap Copy in the popup. Next, highlight the text you want to apply the formatting to, and select Paste Formatting from the list of options. Too easy.

## FREAKING LASER BEAMS

OK, so there's actually no lasers to be found in the Office apps. There is,



however, a fake laser buried within PowerPoint's presentation mode. While presenting, presumably from your iPad to an Apple TV or projector, you can tap and hold on the device's screen to bring up a fake laser icon that moves around under your finger. ■

**POWERPOINT'S**  
presentation mode  
hides a surprise.

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## OMNIOUTLINER 2.3 FOR iOS: THE BEST OUTLINING APP GOES UNIVERSAL

BY JEFF CARLSON

**A GOOD OUTLINE IS** an evolving idea. It's a workshop for hammering out the greater shape of something—a paper, presentation, business plan, book, screenplay—by adding, discarding, and rearranging information.

And like most ideas, an outline isn't confined to one location, such as your Mac. In 2011, The Omni Group extended the flexible outlining capabilities of its OmniOutliner Mac app to the iPad by releasing OmniOutliner for iPad. Now, with the release of the universal app OmniOutliner 2.3 for iOS ([omnigroup.com](http://omnigroup.com)).

### OMNIOUTLINER 2.3 FOR iOS



#### AT A GLANCE:

Version 2 added iOS 8 polish and a lot more power. Version 2.3 extends the productivity to your iPhone too.

#### PROS:

- Universal app as of version 2.3
- Improved performance when viewing complex outlines
- Excellent syncing with Omni Sync Server.

#### CONS:

- New cells initially partially obstructed
- Thumbnail-only Documents view is limiting

#### PRICE:

\$30

#### COMPANY:

[omnigroup.com](http://omnigroup.com)



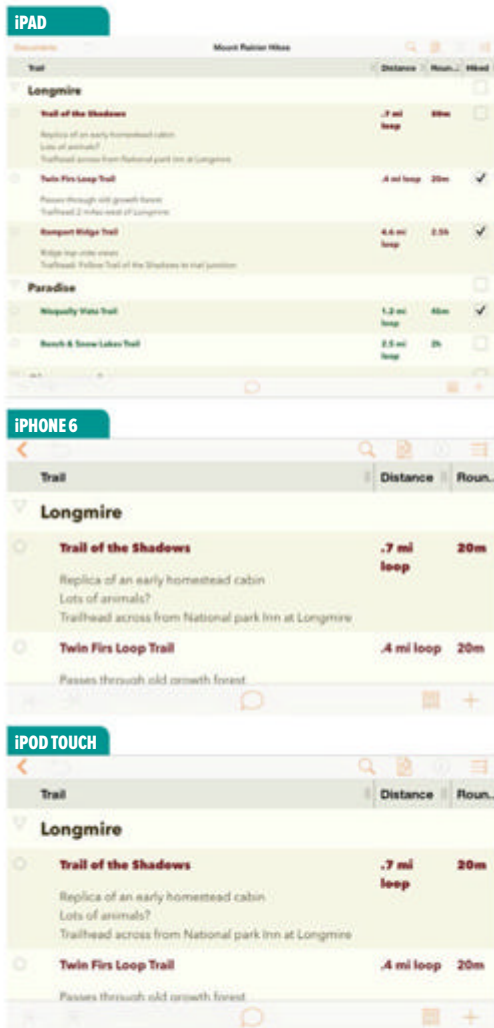
[com/omnioutliner](http://com/omnioutliner)), you can work with your outlines as inspiration (or perspiration) strikes on the iPhone as well, no matter where you are.

## APPEARANCE IS IMPORTANT

OmniOutliner got a major rehaul in version 2.0 to reflect the modern iOS 8/OS X Yosemite visual style, including cleaner lines and no more faux rounded buttons and toolbars. I hesitate bringing that up right away, since the appearance of an interface is usually one of those things you're supposed to notice and forget in favor of how the app's features actually work.

But as version 2.3 goes universal, the appearance is important because even the larger screens of the iPhone 6 and iPhone 6 Plus don't offer an expansive view of a sprawling outline. The minimal interface gets out of the way so you can focus on the outline, even on a relatively puny iPod touch. The text zoom defaults to 120 percent (you can adjust it manually if you like), which works well, especially if you're viewing the same file on multiple iOS devices.

It's also easier to see which items are selected when working in a complicated outline. This is a tiny detail, but when you select a parent row, a faint line appears to indicate which child items belong to it. The interface for selecting and acting on multiple rows is also cleaned up. In the original version, you'd tap the Edit button, which introduced a new set of round selection buttons at the right edge of a column. Now, when you tap that button, you use the existing row handles at left to make selections. From there you can cut, copy, delete, group, or move the rows as a group.



**THE SAME OUTLINE** looks similar across devices—the only difference is how much you can see on a single screen.



Version 2 also enables you to apply new template themes within a document if you want to change the overall appearance, as well as save any custom theme changes to new templates. (That's particularly helpful if you've tweaked the styles to suit your own projects and want to create new documents based on that appearance.)

## HOW WELL IT WORKS AS AN OUTLINER

OmniOutliner for iPad already included the bulk of the malleable features found in the desktop counterpart, and OmniOutliner 2.3 continues those with an extra dose of performance.

In documents with multiple columns, you can drag on the screen with one finger to reposition your view and expose columns that appear off the screen. You can still restrict the data types used in the columns, such as limiting a column's cells to just numbers or dates. (I appreciate that the app lets me type something vague like "Friday" into a cell and automatically converting that to the correct date.)

When scrolling down through long documents, the app still needs to occasionally pause and load more content (as it doesn't load the entire document into memory), but this feels faster and less obtrusive than in the original version.

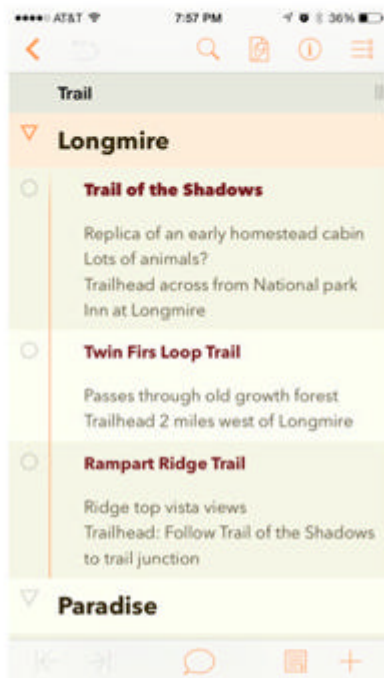
Repositioning rows is a simple matter of drag and drop, with a visible guide that indicates exactly which outline level you're targeting.

As you're creating a new row of data, it's simple to indent or outdent the level using buttons at the lower-left corner of the work area—which just happens to be where your left thumb is positioned while thumb-typing on the iPhone's screen.

I did run into one anomaly: When adding new rows to the bottom of an outline, the cell is initially hidden behind the document's headers, but it pops into view when you begin typing. (I reported that to the developer.)

## CLOUD SYNC

Not long ago a "mobile" version of an application didn't carry many expectations; it could get away with just viewing documents. Now, however, we expect not only editing but a way to make the documents appear



**YOU GET A** lot of recipes to choose from. Just choose wisely.

wherever we are, with as little friction as possible. OmniOutliner takes full advantage of Omni Sync Server, a free service the company built from scratch when it became clear that iCloud wasn't going to work for them. You can also sync using your own WebDAV server, or add outlines to the Local Documents storage area via cumbersome iTunes sync, or by transferring a file from another application using the iOS Open In mechanism.

In my experience, Omni Sync Server is the model of cloud syncing. When you update an outline on the iPhone, for example, the edits are reflected on the iPad and in OmniOutliner 4 for Mac within seconds, even when the document is open on all the devices simultaneously.

If a document is edited in two places before they're synced, the server displays two copies with the source added to the title, such as: "Test Outline (conflict from mobile on iPhone 6)." I'd love to see a way to highlight differences between the documents. It's a nice touch that when you delete one version, the file name reverts back to the original and doesn't litter your documents list with messy conflict names.

I would like to see an option to view documents as a text list instead of just the grid of previews. It can be difficult to parse long document titles when they run past the border of the document's box, especially on the iPhone. Also, editing a filename means tapping the title on this screen, which is a small target on the iPhone. Currently, the only custom viewing option here is to sort the documents by date or title.

## A NEWER, BETTER OUTLINER

The big news about OmniOutliner 2.3 for iOS is its ability to run on the iPhone as well as the iPad. It's worth noting a few welcome features that were added in version 2.0. There are settings specific to using an external keyboard with the app: using the Tab key to navigate between cells, showing keyboard shortcuts in inspectors, and typing Command-V to paste text styled or plain. The app can import text shortcuts from TextExpander if it's installed. And, additional templates from OmniOutliner 4 for Mac are available. Like the ideas you'll be working on, OmniOutliner 2.3 for iOS is evolving nicely. ■



**THE DOCUMENTS**  
screen displays only a  
grid of previews.



## ZAGG SLIM BOOK CASE AND KEYBOARD FOR iPad AIR

BY JASON CIPRIANI

**THE ZAGG SLIM BOOK iPad AIR CASE** ([go.macworld.com/slimbook](http://go.macworld.com/slimbook)) with Backlit Keyboard is not only one of the longest-named products I've ever encountered, but also a competent Bluetooth keyboard. It offers backlit keys for late night typing sessions. Shortcut keys let you quickly access commonly used commands on iOS, such as Spotlight search, Siri, media controls, and quick-lock.

Even though I grew fond of the Slim Book during my testing, it had some shortcomings.

## IS THERE AN ECHO IN HERE?

There's no other way to say this: The keys sound hollow. I'm not sure if it's due to the material that sits behind the keys, or the material the keys themselves are made out of, but the sound as you hammer away on the keyboard elicits the feeling of using a cheap keyboard.

That's not a fair statement, entirely, as I've yet to find a single key that shows signs of wear and tear during my time with the Slim Book. With each keypress, the key has little play and pops right back into place the instant the keystroke is completed.

The size and spacing of the keys are par for the course when it comes to a tablet keyboard. There's nothing that makes the layout stand out, nor is there something to find fault in.

## IT'S A CASE, TOO

Bluetooth keyboards that double as cases are often ugly, bulky, and serve very little purpose outside of protection. The case included when you purchase a Slim Book is a hard plastic shell that wraps around the exterior of your iPad. It may not be the prettiest case, but it's far from bulky and has purpose.

The case doubles as a mounting mechanism for the keyboard, which I'll dive into more detail about in a minute. But a side effect of this approach is that you're not limited in the direction the iPad is facing when you place it into the hinge.

Meaning, you can turn the iPad around so its screen is facing away from the keys, turning it into an impromptu stand to watch a movie. Or you can essentially close the keyboard with the screen facing out and hold your iPad like you normally would (admittedly much thicker than before) and read or browse the web. Since the keyboard detaches from the rest of the case, you can also leave the keyboard behind and still have a protective case for your iPad.

I'm not normally a fan of cases, but after using this case and keyboard combo I learned to appreciate the versatility the case brought with it. It not only protects your iPad, but it adds functionality.

### ZAGG SLIM BOOK



#### AT A GLANCE:

The Slim Book is light with great backlighting, but the keyboard is loud and the hinge connection is weak.

#### PROS:

- Case/keyboard combo is lightweight and versatile
- Good backlighting

#### CONS:

- Would benefit from more viewing angle options
- Construction feels cheap

#### PRICE:

\$130

#### COMPANY:

[ZAGG.com](http://ZAGG.com)

**I'M NOT NORMALLY A FAN OF CASES, BUT AFTER USING THIS CASE AND KEYBOARD COMBO I LEARNED TO APPRECIATE THE VERSATILITY THE CASE BROUGHT WITH IT.**

## THE VERDICT HINGES ON THE HINGE

It's easy to look past the sound the keys make, but one thing I have a hard time overlooking is the hinge. As I mentioned earlier, the case included with the Slim Book doubles as a method to connect the keyboard to your iPad.

Two slots on the side of the case act as the female end of a connector, with the male counterparts protruding from within the hinge. When you press the case into the channel, magnets help line up the two parts, and a click sound can be heard as the iPad is put in place.

My concern boils to the surface as you try to adjust the hinge's viewing angle by pushing the iPad away from your body. Instead of providing a little bit of resistance when you've reached the maximum viewing angle for the hinge, the half of the case containing my iPad would pop out of the hinge and fall onto my desk.

Worse, I couldn't reliably tell when this was going to happen, since the amount of pressure needed to knock the iPad out varied. Sometimes the iPad would pop out with little to no pressure. Other times it took a more of an effort on my part to make it happen. Regardless of how much pressure I put on the iPad, coming out of the hinge isn't the ideal outcome.

## BOTTOM LINE

The Slim Book offers more than most keyboard-case combos do. I really like the innovative approach Zagg took with bringing added functionality via the case. The hinge's main issue is its lack of viewing angles combined with little feedback before it spits out your iPad like a child tasting broccoli for the first time. ■



**SOMETIMES THE iPad WOULD POP OUT WITH LITTLE TO NO PRESSURE. OTHER TIMES IT TOOK MORE OF AN EFFORT ON MY PART TO MAKE IT HAPPEN.**





*"I want  
to be  
a bench.  
Recycle me."*



[IWantToBeRecycled.org](http://IWantToBeRecycled.org)



KEEP AMERICA  
BEAUTIFUL



## GARMIN VIVOSMART: FITNESS TRACKING AND NOTIFICATIONS FOR LESS

BY CHUCK LA TOURNOUS

**WITH THE APPLE WATCH** scheduled for a release, is there still a place in the market for another smartwatch? Garmin's latest entry into the field, the Vivosmart ([garmin.com/vivosmart](http://garmin.com/vivosmart)), looks to differentiate itself from Apple's offering by being a fitness tracker with smartphone features, rather than a smartwatch that also happens to track your activity.

The \$170 Vivosmart is first and foremost a fitness tracker, keeping tabs on your activity by covering the number of steps you take, steps remaining to your daily goal, distance covered, calories burned and time spent inactive—more on that later. (A separate heart monitor can provide additional metrics.)

The Vivosmart looks like a traditional fitness band too, a slim, soft rubberized band with smooth, rounded edges. While many were skeptical when Apple executives claimed they slept with their Apple Watch, I easily slept while wearing the Vivosmart—it's unobtrusive and extremely comfortable, and I usually forgot I was wearing it. I've worn it pretty much nonstop for several weeks and have never found it bothersome, even when typing on

### GARMIN VIVOSMART



#### AT A GLANCE:

Vivosmart makes a compelling case for fitness enthusiasts who appreciate a few smart features in their fitness tracker.

#### PROS:

- Comfortable design.
- Super long battery life.
- Well implemented activity tracking and notifications.

#### CONS:

- Companion app doesn't provide much value.
- Super long battery life.
- Text orientation makes longer notifications hard to read.

#### PRICE:

\$170

#### COMPANY:

[Garmin.com](http://Garmin.com)



my laptop, which is what led me to stop wearing watches years ago.

The Vivosmart is waterproof up to 50 meters, so you can wear it while swimming or in the shower. It fastens to your wrist with a pair of pegs that snap into holes along the band. An optional “keeper” can be placed on the band to prevent it from unfastening, but it added an a degree of bulkiness I didn’t care for. I removed it shortly after using the device and never had an issue with the strap coming undone.

## CHARGING AHEAD

Battery life is impressive: Garmin says the Vivosmart lasts up to seven days on a charge, and I easily surpassed that throughout my testing. It uses a proprietary USB charger that clamps onto the device like a clothespin, aligning with charging leads on the inside of the band. It’s a similar approach to the Apple Watch’s charger, just think clip instead of magnets.

The Vivosmart’s LED display is completely invisible when not in use, and it’s clear and bright when on, even in daylight, although no one will ever mistake it for a retina display. A simple double-tap wakes the display; you navigate through the device’s menus by swiping and tapping. In addition to fitness-related information, the Vivosmart shows you the time and date and even lets you control the music on your iPhone: play/pause, skip, or repeat tracks. But you can’t adjust the volume.

Lift the Vivosmart when you get a notification and you immediately realize the display is oriented sideways as you look at it. Given the device’s shape, there’s really no other way it could be, but it does make it somewhat awkward to read anything longer than the time.



**VIVOSMART CAN DISPLAY** your heart rate if you pair it with a heart rate monitor.

## THERE'S AN APP FOR THAT...BUT YOU MAY NOT WANT IT

Once you've paired the Vivosmart to your iPhone or Android device via Bluetooth, a companion app descriptively called "Connect" transfers your fitness data from the Vivosmart and displays it as gauges in sections for each type of measurement. The app doesn't really seem to enhance the Vivosmart, however—I rarely bothered to look at it after the first week or so, and when I did, I came away with an "OK, so what?" feeling. The data seemed static and provided no trending or other insightful information.

The app also pairs with the MyFitnessPal app to keep track of how many calories you've consumed, measured against the Vivosmart's estimate of how many you've burned. That's handy if you're willing to input everything you eat and drink, but seemed like more work than it was worth to me.

You can connect to other users to share and compare activities and issue or accept challenges, but finding connections isn't intuitive and the social aspect doesn't seem well thought out. More useful is the ability to use the app to adjust settings on the device, including a silent, vibrating alarm that's very effective in waking you up without disturbing your partner.

Even without the app, the Vivosmart provides plenty of feedback. In addition to displaying your activity, the device sets a daily step goal for you and adjusts it each day based on your previous day's activity. Meet your goal, and you're treated with a congratulatory message in all caps and an 8-bit rendition of fireworks. A little cheesy, perhaps, but I found the positive reinforcement to be very motivating. I'd check my numbers during the course of the day and found myself taking an extra stroll to make sure I earned my daily fireworks.



**THE CONNECT COMPANION**  
app is OK, but doesn't add much to the Vivosmart

## GET UP AND MOVE

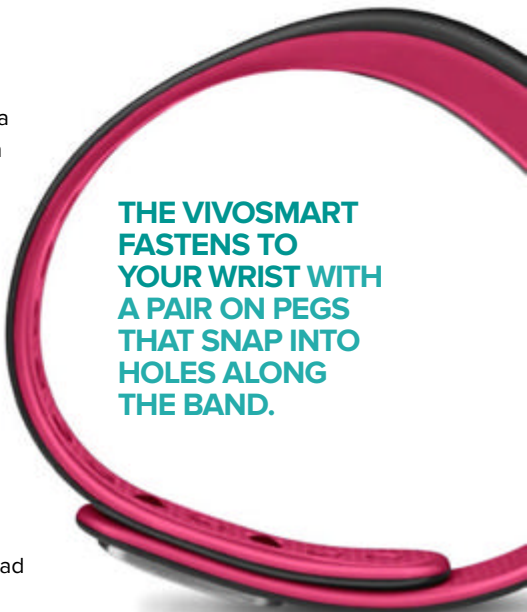
As its name implies, the Vivosmart is more than just a fitness band, venturing into smartwatch territory with some very handy features. Apple executives touted a feature on the Apple Watch that will alert you if you've been idle too long. The Vivosmart already has that feature—if it senses you've been inactive for an hour, an unmistakable vibration and the band's display will tell you in no uncertain terms to “MOVE!” A few minutes of walking resets the timer.

I developed a love/hate relationship with this. When I was too busy to heed its advice, I found the notifications to be a little nagging and annoying. When I was merely idle, however, I appreciated the reminders to get up and move a little. All in all, I'm glad they're there.

The Vivosmart also uses its Bluetooth connection to your phone to provide notifications—anything that appears on your phone's Notification screen will also pop up on the Vivosmart's display, along with a short vibration to get your attention. You can't interact with the notifications; that is, you can't reply to emails or texts (or even delete them, for that matter) but you can scroll through them and decide whether they merit immediate action. As someone who usually has his phone on vibrate—and misses a lot of calls because he doesn't feel the vibrations—I found the Vivosmart's notifications to be extremely useful and far more noticeable than my phone's alerts.

## BOTTOM LINE

What's a fitness enthusiast with a geek streak to do? Ultimately, it comes down to which proclivity is stronger and what your budget will handle. The Vivosmart is not a smartwatch, nor does it try to be—which is, well, smart. Instead, it offers a solid alternative to Apple's fully geeked out watch: a well-made, comfortable and tremendously useful fitness band with smart features that take great advantage of being paired to your iPhone. If that appeals to you, all those features are yours without the wait and at about half the entry price of the Apple Watch. ■



**THE VIVOSMART  
FASTENS TO  
YOUR WRIST WITH  
A PAIR OF PEGS  
THAT SNAP INTO  
HOLES ALONG  
THE BAND.**

# What's new at the App Store



## STAR WARS REBELS: RECON MISSIONS

Looks like the franchise might be in good hands with Disney. Star Wars Rebels: Recon Missions ([go.macworld.com/starwarsrebelsrecon](http://go.macworld.com/starwarsrebelsrecon)) is a spinoff game of the new animated series that takes place in the years just before “A New Hope.” This is a freemium game with plenty to do, with 30 levels of challenges immersing you in George Lucas’ universe.

## Periscope



Not long ago, we told you about Meerkat, an app that lets users stream live video through their Twitter feeds. Competitors are now arriving. Periscope ([periscope.tv](http://periscope.tv)), in fact, is owned by Twitter itself—but it has pretty much the same easy, intuitive handling that its predecessor does. One big difference: Periscope makes the video available as a replay on its network for up to 24 hours, whereas Meerkat videos disappear just as soon as the live feed is over.

## Strea.am



Here’s another Meerkat competitor: Strea.am ([stre.am](http://stre.am)) is slightly more versatile than the older app, letting you alert friends through Facebook and Google Plus to your live feeds, not just Twitter. It also produces a seemingly sharper live picture than other similar apps. The race is now on to see which live video app will come out on top.

## Roadie



Is this Uber for UPS? Roadie’s ([roadie.com](http://roadie.com)) makers explain: “Roadies get paid for driving to the places they’re going anyway. Senders post Gigs with details and pictures of their items and drivers choose the ones they like based on location, price, sender ratings and reviews. No bidding or bartering.” iOS is even transforming package shipping. What next?—JOEL MATHIS

# Wallet cases: stash away cash and cards with your iPhone

This month we look at wallet cases that holds your cash and cards yet keeps your iPhone safe from everyday wear-and-tear.



## PORTEFEUILLE FRANÇAISE

The Portefeuille Française (iPhone 6 and 6 Plus; \$100 to \$120; [carteblanche.com](http://carteblanche.com)) is a stylish pink wallet case, with gold accents and a black trim lining. The wallet includes five card slots, a cash pocket, and a zippered compartment where you can store all of your necessities. It also sports a wristlet strap for easier carrying and can be combined with the optional Coque case for additional protection.

## PORTENZO

The Faux Ostrich iPhone Sleeve (iPhone 5/5S, 5C, 6, and 6 Plus; \$50 to \$60; [portenzo.com](http://portenzo.com)) is a genuine leather sleeve that sports a faux-ostrich texture and finish. Handcrafted to slim perfection, this trendy sleeve not only provides basic protection, but its unique texture and look makes it easier to grip while still looking great.



# Wallet cases



## TRIDENT

The Apollo Folio (iPhone 6; \$35; [tridentcase.com](http://tridentcase.com)) is a made from recyclable, biodegradable, and compostable plastic, so you can rest assured that the product will have minimal impact on the environment when the time comes for a replacement. The Apollo Folio slides in and out of your pocket easily, includes a self-applicable screen protector for extra peace of mind, and comes with interchangeable back plates for even more personalization. Should you wish to leave your wallet at home, there are two card slots inside the cover for cash, credit cards, or a photo ID.

## URBAN ARMOR GEAR

The Rogue Folio (iPhone 6; \$40; [urbanarmorgear.com](http://urbanarmorgear.com)) provides complete protection with additional storage for up to three credit cards or photo IDs. Water resistant and lightweight, the wallet case meets military test drop standards for extra peace of mind, provides quick access to your ports and buttons, and features a glare-free camera opening that makes it possible for you to take pictures without worrying about unwanted flash halos.







## PAD & QUILL

The Traveler (iPhone 6 Plus; \$80; [padandquill.com](http://padandquill.com)) features a convenient little pocket where you can store a credit card or photo ID. Handcrafted from full-grain leather, the case sports parachute-grade stitching and a generously sized camera opening, and comes in Galloper Black, Dark Chocolate, or Whiskey.

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## KAVAJ

The Tokyo (iPhone 6; \$30; [kavaj.com](http://kavaj.com)) protects the back of your iPhone with a simple, genuine leather shell. Designed to improve your grip for easier handling, the case includes pockets in the back to stash either credit cards or cash, and offers unobstructed access to all of the iPhone's ports and buttons.







DO YOU LIKE THE ALUMINUM LOOK? DO YOU WANT YOUR WATCH BAND TO MATCH YOUR WATCH CASE? DO YOU HAVE \$10,000? THESE ARE JUST A FEW THINGS TO CONSIDER WHEN SELECTING YOUR FIRST APPLE WATCH.

# WHICH WATCH?

HOW TO PICK THE APPLE WATCH

THAT'S RIGHT FOR YOU

BY LEAH YAMSHON



## VIDEO

To view this video, go to [go.macworld.com/watchleah](http://go.macworld.com/watchleah)



IDG.tv

Picking an Apple Watch isn't like picking out your next iPhone—forget about focusing on specs and storage size. Instead, you'll be looking at alloys (aluminum, stainless steel, or solid gold?), style (sporty, classic, or bling-bling?), and price (\$349, \$549, or the cost of iPad Air 2's for you and 19 friends?) The Apple Watch is uncharted territory, but we're here to help you navigate. Here are some things to consider before you buy your Apple Watch.

## THE WATCH ITSELF

Under the hood, the Apple Watch hardware is exactly the same. The only differences between the three models are cosmetic ones, so if you opt for a \$10,000 Edition, it will function just the same as a \$349 Sport (more on price in a little bit). The storage and battery life is the same across the board ([go.macworld.com/storage](http://go.macworld.com/storage)): You'll get 8GB of storage (Apple says you'll be limited to 2GB of music storage and 75MB for photos within the Photos app) and up to 18 hours of battery life on a single charge.

A big criticism of smartwatches so far has been on size: The ginormous faces of some of these watches look ridiculous on a smaller wrist—namely, women's wrists ([go.macworld.com/large](http://go.macworld.com/large)). That's why Apple made two size options for the Apple Watch: 38mm and 42mm. You can see what each of these look like on your own wrist within the Apple Store app on your iPhone—the app shows their actual sizes. Once you're on the Apple Watch landing page within the app, go to *Learn more* → *View pricing* → *Compare case sizes*.

## BANDS ON THE RUN

Most of the watch bands come with different size options, but don't pick your favorite band until you've measured your wrist: Some bands



**...OK, THIS ISN'T** true to size, but if you launch the Apple Store app on your iPhone, you can toggle back and forth between 38mm and 42mm case sizes to get a real-life feel.

are limited to one case size, and others only cover a limited range. (I like the Leather Loop, but my wrist is 146mm around—and the Leather Loop isn't available for the 38mm case, which is my preferred size—so I'll have to pick a different band. Bummer.) Apple has a comprehensive sizing guide, so keep that in mind when picking your band and case.

Here's a breakdown:

**MODERN BUCKLE:** Sorry, dudes—the Modern Buckle ([go.macworld.com/modern-buckle](http://go.macworld.com/modern-buckle)).

**Large:** Fits wrists 160mm to 180mm

**Large:** Fits wrists 180mm to 210mm

**42mm:** Fits wrists 150mm to 200mm

**42mm:** Fits wrists 140mm to 205mm

**42mm:** Fits wrists 145mm to 215mm

**42mm:** Small/medium fits wrists



140mm to 185mm; Medium/large fits wrists 160mm to 210mm

All of the bands are interchangeable with each of the Watch models, as long as they're for the right Watch case size. So, if you get the 42mm Watch case, you could pick any band designed for the 42mm version.

## BE A GOOD SPORT

Yes, yes, yes: Cases and bands are all about size. But the models themselves are all about materials, style, and price. Which one should you pick?

For fitness buffs—or for those of you who have to have an Apple Watch, but are on a tighter budget—your pick is a no-brainer: Go with the Apple Watch Sport ([go.macworld.com/sport](http://go.macworld.com/sport)).

Priced at \$349 for the 38mm version and \$399 for the 42mm version, the Sport has an aluminum case, features Apple's Ion-X glass display, and ships with the fluoroelastomer (say that three times fast...) Sport Band. There's actually a lot to like about the Sport Band, too: It's comfortable, durable, and sweat-proof, and it's available in black or white if neon colors aren't your thing.

The Sport is also a good pick if you're still not entirely sure about this whole Apple Watch business. Because it's more affordable, it makes a great starter device—for those of you who have first-generation device jitters. And if you end up loving your Apple Watch Sport, you can upgrade its band later, though the metals won't precisely match.

**LOOK AT** all of these bands!



## THE (CLASSIC?) APPLE WATCH

Apple's mid-range offering is simply called the Apple Watch ([go.macworld.com/awatch](http://go.macworld.com/awatch)), which is a little confusing, considering that Apple refers to its entire product line as the Apple Watch Collection. (Thanks, Apple!) Name aside, the (classic? basic?) Watch offers a bit of both sides of the coin—it packs extra style that the base Apple Watch Sport lacks without breaking the bank like the Apple Watch Edition. Prices range between \$549 and \$1,099 depending on case size and band style.

The Watch costs \$200 more than the Sport because of its stainless steel case (instead of aluminum), sapphire crystal covering the display, and black accent on the digital crown. Apple boasts that its signature stainless steel is 80 percent harder than normal stainless steel, and it certainly is sleek-looking.

The lowest-price Watch ships with a Sport Band, but the stainless steel case really shines when paired with a leather (Classic Buckle, Modern Buckle, or Leather Loop, all with stainless steel finishes) or a stainless steel (Milanese Loop or Link Bracelet)

**ALTHOUGH THE BANDS** are interchangeable, most bands have stainless steel features to match the stainless steel Watch.

band. Yes, you can pair the Apple Watch Sport case with a Milanese Loop band, but the aluminum will clash with the stainless steel, while the classic Watch was made for these bands. Plus, the Apple Watch also has a space gray stainless steel case option that's super svelte, with bands to match.

So if you have a somewhat flexible budget and want a more polished look, go with the Apple Watch.

## LIMITED EDITION

We all want to be worthy of the Apple Watch Edition ([go.macworld.com/edition](http://go.macworld.com/edition)), but really, this one flat out

comes down to price: Apple's crème-de-la-crème offering ranges from \$10,000 to \$17,000. (Seventeen. Thousand. Dollars. There goes my Apple Watch pipe dream of the rose gold Edition with the rose gray Modern Buckle band.) It's gorgeous, and one of the priciest products the company has ever made. That kind of dough gets you either a yellow gold or (drool-worthy) rose gold case, and ships with a Sport Band, Modern Buckle, or Classic Buckle.

Though you could pre-order the Edition online, this seems like something you'd want to try on first, if you can find a store that carries it: The

HELLO,  
gorgeous.





Edition will be available in limited numbers, in select Apple and high-end retail stores. Even though it's available in both the 38mm and 42mm case sizes, it looks like a piece of high-end jewelry—meaning it might not be everyone's cup of tea, style-wise.

So, if you have a sky-high budget, if your name is Beyoncé, or if you simply must have a gold watch to match your daily Oscar de la Renta,

then the Edition is for you.

Just remember: Even though the battery will be replaceable ([go. macworld.com/replace](http://go.macworld.com/replace)), the Apple Watch is still a first-generation mobile gadget with a limited shelf life—it will likely be technologically outdated after a couple of years at most. Are you willing to take the plunge, or are you going to wait for the second round?

# HANDS ON: WHY TRYING AN APPLE WATCH MADE ME WANT TO BUY ONE

THE FANCY CASES  
AND STRAPS ARE  
NICE, BUT IT'S THE  
SOFTWARE THAT  
I'M SOLD ON.

BY SUSIE OCHS



had a \$17,000 Apple Watch Edition strapped to my wrist today. Rose gold ([go.macworld.com/rose](http://go.macworld.com/rose)). 38mm. Rose gray strap that felt like butter, with a modern buckle also in solid 18-carat gold. It was beautiful. But as luxe as the materials are, my hands-on demo time with the Apple Watch made me confident that I can go with the entry-level Apple Watch Sport and be just as happy.

Why? It's the software, silly! The Apple Watch's apps ([go.macworld.com/wapp](http://go.macworld.com/wapp)), glances, and notifications are so easy to use and well-thought-out that once I started tapping, pressing, and scrolling around the tiny display, I quickly forgot what materials were in the case and strap. Here's what I found so compelling in my brief demo time, and why I'm looking forward to strapping an Apple Watch (Sport, natch) onto my wrist come April 24.



#### VIDEO

To view this video, go to [go.macworld.com/watchsusie](http://go.macworld.com/watchsusie)



## ATTENTION TO DETAIL

The Apple Watch has so many delightful little details, and I'm not even talking about how the clasps on the gold Apple Watch Edition's bands are also made of gold. Again, it's the software. Scrolling around the tiny screen is smooth, and even though the home screen's tiny app bubbles look like you'd need to tap them with fingers the size of Q-Tips, I found them easy to hit.

If you nudge an app's icon toward the center, it bulges a little bigger, and you can tap it with more ease, or twist the digital crown to open it. The animation from home screen to app even varies in speed based on how quickly or slowly you twist the digital crown. I immediately faded an app in and out with glee, over and over, like a kid in the back seat of a car who just found out about power windows.

Using the Digital Touch ([go.macworld.com/dtouch](http://go.macworld.com/dtouch)) feature was a wow moment too. Press the button below the watch's digital crown to bring up your favorite contacts—from this screen you can call them, send a message, or enter Digital Touch if they also have an Apple Watch. Then you can draw an image with your finger, tap out a pattern that will be tapped on their wrist, or even send your heartbeat.

We knew that all already, sure. But



seeing—and feeling—it on my wrist was next-level cool. The image I drew of a pink heart faded out only to flicker back to life on the other Apple Watch, in the same way I drew it. I received a subtle wrist-tap from a very nice Apple employee I'd just met and got as excited as if it had been from my best friend. And holding two fingers over the watch's face prompts Digital Touch to tap out your heartbeat on the other person's wrist—less invasive than a phone call, but just as intimate (and infinitely less risky than racy photographs). I predict this will be the biggest mover of his-and-hers Apple products since FaceTime.

**STRAPPING ON A**  
**\$17,000** hunk of wrist candy can really raise the heart rate.

## QUESTIONS REMAIN

I'd hoped Apple would get specific about the Apple Watch's battery life,

and the company claimed 18 hours on stage and broke that down in painstaking detail on its website ([go.macworld.com/battery](http://go.macworld.com/battery)). Apple is good about not overestimating battery life, and from what I saw in my demo, these figures seem reasonable. The watch is designed to get you the info you want quickly, both in how the information is presented and how easy it is to move between it. You probably won't be staring at it for huge stretches of time unless you're trying to read all your email or something.

For example: To see your glances, you'll raise your arm to wake your watch to its clock face. Stop for a second. Depending on the clock face you're using, you could get some detail right there, like your next calendar appointment, progress toward your steps goal, or the temperature. Otherwise, just one swipe up from the clock face gets to your glances, and then you swipe between each one. It only takes a fraction of a second to absorb what they're trying to tell you: Stock up. Text mom. Your team won. Your appointment is clear across town. You better leave.

This means that just one swipe up and a half-dozen swipes right-to-left can show you a lot of information and pressing any of the single-screen glances sends you to a more fleshed-

#### **TAPPING THE TEENSY-**

**WEENSY** app icons was much easier than I thought it'd be.



out experience in the full notification or app. Notifications can be seen by swiping down the clock face from the top. Apple did a lot of work to make using a smartwatch with so many features this simple.

But not every feature could really

**BEING ABLE TO UNLOCK**

a door at the W Hotel is cool, but I was hoping the event would have more HomeKit demos. All we saw was an app from Alarm.com.

be tested in Apple's demo room. It'll be interesting to see if the watch is a good workout partner even if you don't have your paired iPhone with you. The watch's accelerometer can count your steps as you run, but that uses math to extrapolate your distance. If you bring an iPhone, your whole route is tracked with the iPhone's GPS. The watch has iPod shuffle-like storage to play some songs during your run, as long as you have Bluetooth headphones.

**WHY I'M BUYING ONE**

It's striking that the Apple Watch's best features solve a problem I didn't have before I had an iPhone. The

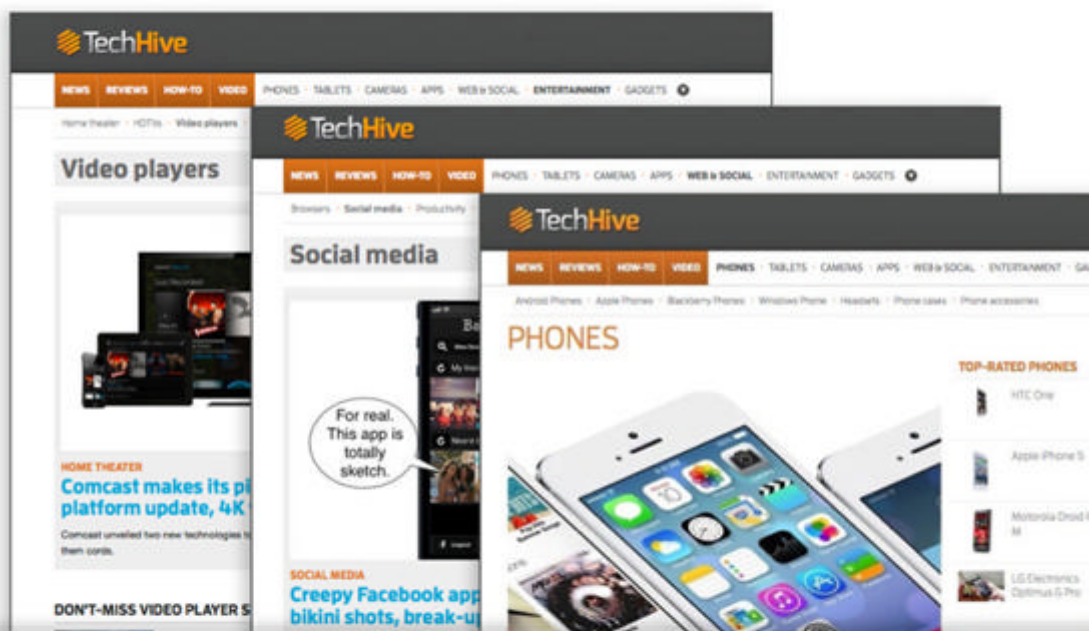
problem is: I look at my iPhone too much. Throwing more technology at that problem seems frivolous, but if the right balance of notifications and glances actually succeeds to sift the signal from the noise? If it can reduce the number of times I unlock my iPhone to do a simple little thing like reply to a text, only to fritter away time on three or four apps? That could change my game.

Apple begins taking preorders April 10. The Apple Watch collection will be on display at the Apple Store, so you can try them on if you're in the area. The watches ship April 24. Have you decided if you're getting one? Which watch? Which band? ■





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## How to design your own great-looking business cards

Your business card speaks volumes about how professional you are. We look at the design points that could make or break your next client contact.

BY LESA SNIDER

**J**ust like the clothes you wear, your business card tells the recipient if you're professional, artistic, or a big ol' ball of cheese. Aside from the aesthetic message, you've also got to pack a ton of info into a tiny-teeny space and keep it readable. To put your best business card forward, try following these essential design tips.

## PICK A PRINTER

The first step in designing your own business cards is to pick a printer. There are online resources aplenty, including VistaPrint ([vistaprint.com](http://vistaprint.com)), Overnight Prints ([overnightprints.com](http://overnightprints.com)), Moo ([us.moo.com](http://us.moo.com)), and Zazzle ([zazzle.com](http://zazzle.com)). If you're a reseller, try 4over ([4over.com](http://4over.com)). Most of these services have web-based design widgets, though you can upload your own designs, too.

Check the printer's website for document specifications such as size, resolution, color mode, and which file format to submit (vector-based PDFs keep your text nice and

crisp). Better yet, see if they're got a template that you can download and customize.

## USE IMAGERY

A picture is worth a thousand words and that's true for business cards, too. If you're promoting a service that you perform—think attorneys, consultants, therapists—include your photo on the front of the card, just like a savvy real estate agent would. If you create a product, use a photo of that. If you're a photographer, place your best photo on the front of the card and your second best on the back. If you're a travel agent, use



**NOTICE HOW FRIENDLY** the new design is (left), versus the old design (right). The right edge of the photo in the new design was faded out using a layer mask in Photoshop to provide a calm spot for text.



**ALIGNING A PHOTO** at left and stacking the contact info at right vastly improves the look of the original card.



photos of the locations you book. For more on designing with imagery, see this column ([go.macworld.com/imagery](http://go.macworld.com/imagery)).

## ALIGNMENT

When many folks read, their eyes enter the piece at the top left, move right, and then move down. Try placing a photo or logo on the left and your contact info on the right. Since the line width of your contact info will vary, opt for right alignment near the right edge of the card.

## USE AN EMAIL ADDRESS THAT INCLUDES YOUR URL

Unless you're designing a personal card for friends, use an email address that includes your website domain. Nothing screams "startup" as loudly as an email address that ends in hotmail.com, yahoo.com, or even gmail.com. If your email address

includes your URL, you don't have to include it elsewhere in the design!

## SPACING

Adjust the spacing between lines of text so that related items are closer together than unrelated items. For example, instead of putting equal space between each piece of contact info, put less space between your name and title, less space between the lines of your address, less space between phone numbers, and so on. Rather than using blank lines to control space, use your app's line spacing, leading, or space before and space after paragraph controls.

If necessary, adjust the spacing between individual letters by using your app's character spacing or kerning controls. Pay special attention to numbers—they often have ugly spacing!

## USE COLORED TEXT

While it's important to keep text readable, it doesn't have to be black. If you're designing on a white or light-colored background, try using charcoal gray. Even better, snatch a dark color from the logo or photo you're using—this trick creates consistency by utilizing colors that are already in your design.

If you're designing on a dark-colored background, use a very light color instead of pure white to keep contrast down. Colorizing certain bits of text is also a great way to draw attention to them. For example, if you prefer to be contacted by phone rather than email (!), colorize your phone number.

For more on choosing colors that go well together, see this column: [go.macworld.com/color](http://go.macworld.com/color). For more on typography, read this column: [go.macworld.com/type](http://go.macworld.com/type).

## DANGEROUS DANGLING

While it's fine for a photo or other artistic background element to “bleed” off a card's edges, your logo and contact info need breathing room, else they look like they're about to fall off the card. To avoid this, incorporate an equal amount of space between each element and the card's edges (say, a quarter of an inch).

## PICKING THE RIGHT FONT

Sans-serif fonts such as Frutiger, Myriad,

Arial, and Helvetica are easier to read at small sizes because they lack the “feet” of serif fonts like Times, Minion, and Garamond. If you're placing light-colored text atop a dark background, it's crucial to use a sans-serif font, else the dark ink spreads into the letterforms and renders them unreadable. You can also add contrast to your card's text by using different font styles within the same font family (say, Myriad Bold with Myriad Light).



## MATTE VS. GLOSSY

People write on business cards all the time. For example, you might jot down a price quote, where you met the person, the document you're supposed to email them, and so on. While glossy business cards look slick, they're impossible to write on. Instead, opt for a matte finish.

By following these tips, your business cards will always look their best. Until next time, may the creative force be with you all. ■

## VERTICALLY SPACING

text according to its content type is an important design technique and makes the text easier to read.



## Three contact manager apps that beat the one on your phone

These third-party apps add syncing, organizational and other features you won't find on the stock contact app that came with your phone.

BY LIANE CASSAVOY

I've said it before, and I'll say it again: your smartphone's contacts app isn't the best contact manager around. A wide variety of third-party apps is available, making it easier than ever to keep track of names and numbers. And just like your list of contacts, these apps are constantly being updated—some of them much improved since last time I looked at them.

## FULLCONTACT

FullContact ([fullcontact.com](http://fullcontact.com)) doesn't look like the Cobook Contacts app I tried out last summer, nor does it act much like it. So I was very surprised to find out that it is, technically, the evolution of that app.

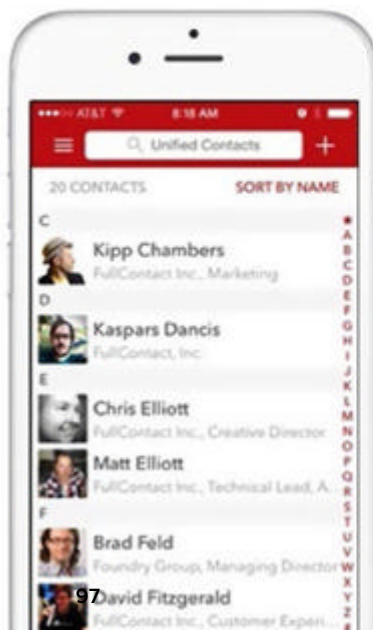
FullContact previously was a Web-based contact manager. The company behind that product acquired Cobook and worked that app's mobile functionality into FullContact's feature set. The result is a well-designed mobile app with the power of a desktop client.

You can sign up for FullContact on your iPhone, iPad or on the Web. (An Android version is in the works.) Once you're logged in, you can add contacts from Facebook, Google, iOS (including iCloud) and Twitter. FullContacts pulls all of those contacts together, adding social media profile pictures (which, alone, makes the app so much more visually appealing than the stock iOS app), and cleaning and de-duping your contact list.

FullContact does this automatically, which may be concerning to

some users. I was hesitant to hand over control, but I found the app surprisingly effective at cleaning up my contact lists. I still had a couple of duplicate contacts left, but I liked that it didn't automatically merge contacts when it wasn't sure.

FullContact also syncs your contacts across your devices. It includes a social feed option, so you can see your contacts' recent posts and a contact



**FULLCONTACT IS** much more visually appealing than your phone's stock contacts app.

history, so you can see the last times you were in touch. All of these are very useful when you're about to reach out to a professional contact.

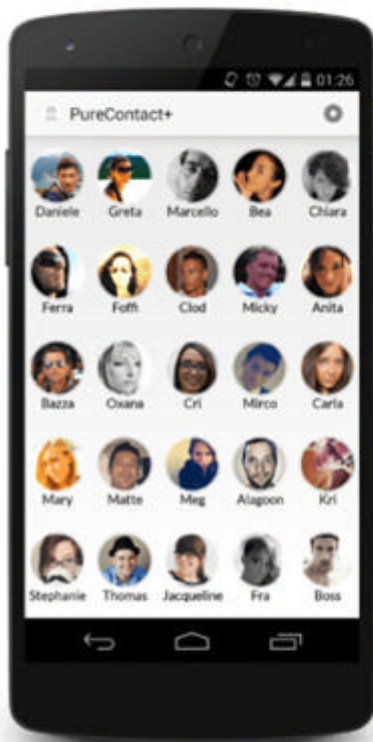
FullContact is available for free, in a Basic version that allows you to store up to 5,000 contacts, a two-way sync with Google every 24 hours, and 10 free Business Card Transcriptions (this is when you take a picture of a business card, and FullContact has a real person transcribe that card and send it back to your phone as a contact). The \$10-per-month Premium version allows up to 25,000 contacts, real-time syncing with Google, and 50 Business Card Transcriptions per month. Both versions allow you to purchase extra transcriptions as needed.

## PURECONTACT

PureContact ([purecontactapp.com](http://purecontactapp.com)) is very different from any other contact manager I've tested. Depending on how you intend to use it, that could be a very good or a very bad thing.

PureContact values quality over quantity, and because of that, it's best thought of as a favorites app, not a full-fledged contact manager. If you're going to be using it to stay in touch with a select group of people, it's incredibly handy. But if you're looking for an app to manage hundreds of contacts, this is not the app for you.

That's because you have to add all of your contacts manually. Unlike



### PURECONTACT IS

simple and sophisticated, but it's not truly a full-fledged contact manager.

most contact managers, PureContact doesn't scour your various address books and services for people with whom you've been in touch. Instead, it accesses your phone's (Android or iOS) address book and lets you select who you'd like to add.

All of the contacts you choose are given their own circle, which you can tap or swipe to access or take action. PureContact lets you assign actions to behaviors, such as a right, left, up or down swipe, or a double tap. You can



have the app e-mail your contacts on a right swipe, but call them when you double tap. I love how you can personalize these actions in a way that makes sense for you.

I also like PureContact's simple, sophisticated design. It's clutter-free and easy to use. At 99 cents, it's also very affordable. Still, that price tag may be hard to justify when the app is simply serving as a souped-up version of the "favorites" function your phone likely already offers.

## CIRCLEBACK

CircleBack ([circleback.com](http://circleback.com)) finds updated information about your contacts and lets you choose which changes to apply.

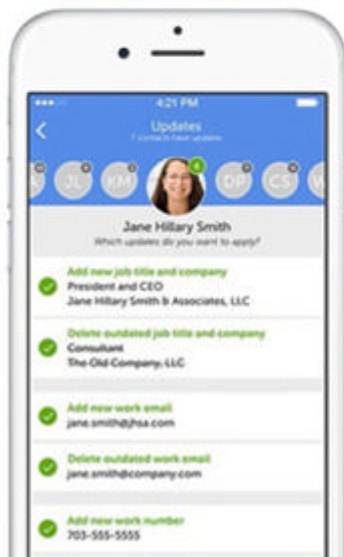
CircleBack is a micro-manager's dream come true—and I mean that in a good way. Like FullCircle, it connects to various sources, including Google, Facebook, Twitter, and Outlook, and imports your contacts into one central location. It also has a Web version and syncs information across various devices.

Like FullContact, CircleBack analyzes your contacts, looking for errors and duplicates. But unlike FullContact, CircleBack puts the work of fixing the errors it finds in your hands. This isn't hard work, however, and it's a level of control that many users will appreciate.

CircleBack's Dashboard displays information on how many of your

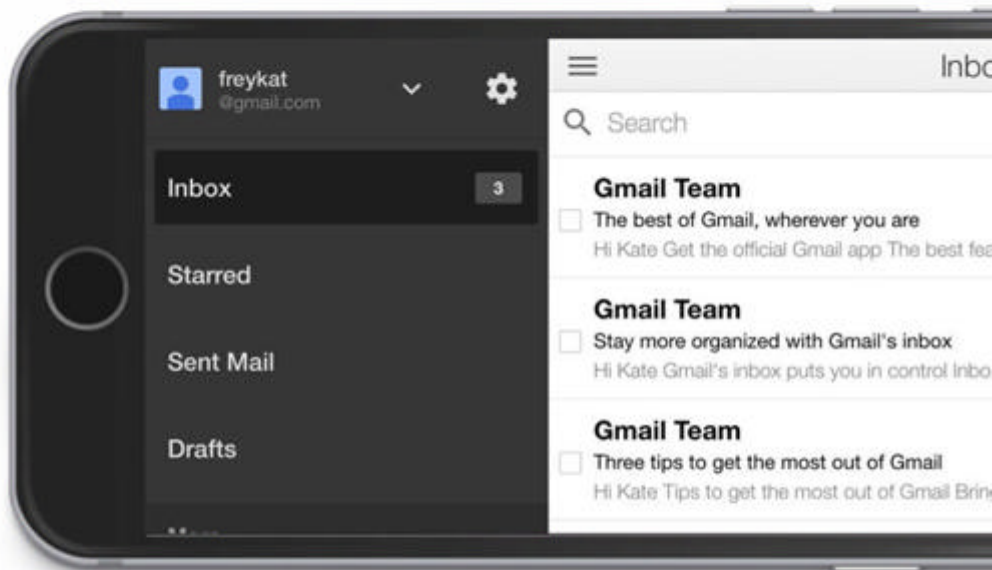
contacts need updates, whether that's a new phone number or a change of title, how many are missing key details (email address, phone number, complete name, or company), and how many are potential duplicates. You can choose to apply as many or as few fixes as you'd like.

CircleBack isn't quite as slick as FullContact on some fronts. FullContact, for example, lets you initiate calls or messages by swiping your screen. CircleBack lacks FullContact's social feeds and the ability to add tags and notes. But where CircleBack excels is at pure and simple contact management. This free app (iOS only; an Android version is in the works) puts you in control of your contacts. For many users, that's more than enough. ■



### CIRCLEBACK FINDS

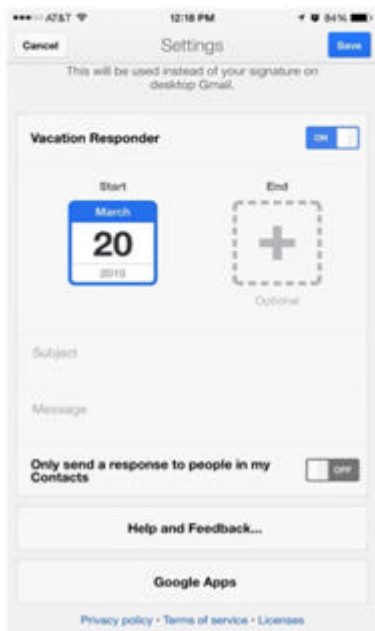
updated information about your contacts and lets you choose which changes to apply.



## Four tricks every Gmail for iOS user should know

There's more to the recently revamped Gmail app for iOS than pretty Material Design. We look at four of our favorite new features.

BY BEN PATTERSON



**NEW FEATURES HELP** you set your vacation responder on the fly (left) and mute and un-mute conversations as you please (right).

**T**here's more to the recently revamped Gmail app for iOS than pretty Material Design: It also comes with some new features that will make Google App users' lives a heck of a lot easier. You can respond to a message straight from Notification Center, open attachments in other apps, and more. Read on for four Gmail tricks—some new, some old, all awesomely helpful.

## SET A VACATION RESPONDER

**1** You can set a vacation reminder directly from the Gmail app, perfect for letting friends, loved ones, and coworkers know that you won't be replying for awhile.

Tap the menu button in the top-left

corner of the page, then tap the Settings button (the one shaped like a gear) next to your email address.

Flip the Vacation Responder switch, then fill in the blanks—you know, start and end dates, subject line, message, and so on. Tap the Save button.

**Bonus tip:** Any vacation message you set in the web version of Gmail will automatically sync with the Vacation Responder settings for the Gmail app, and vice versa.

## SHUSH AN ANNOYING EMAIL THREAD

2 Some group messages are helpful, but other times you'll find yourself wondering how you got thrown into to a conversation that just won't fizzle out. Gmail makes it easy to "mute" an annoying message thread—like the kind where everyone chimes in with a "congrats!" or "so cute!" or "see you there"...over and over again.

Once muted, the thread won't

appear in your inbox again unless you're the only person in the To field.

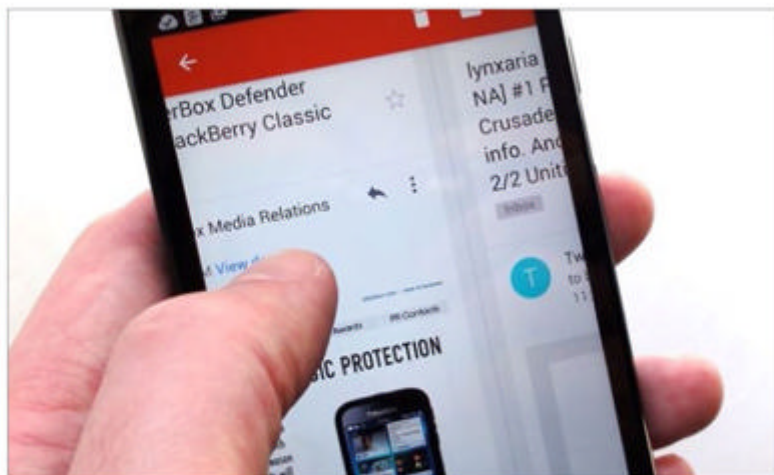
To mute a thread: Open it, tap the down-arrow menu in the top corner of the screen, then tap *Mute*.

Want to unmute a message? Search for "is:muted," open the muted message you'd like to unmute, then move it back to the inbox. That'll clear the thread's Muted label, and you'll once again receive every message sent to the group.

## SWIPE BETWEEN MESSAGE THREADS

3 Here's a handy little Gmail feature that's easy to miss.

Want to read the next message thread in your inbox? No



**WANT TO READ** the next message thread in your inbox? Just swipe one way or the other. It works the same on Android and iOS.

need to tap the Back button to return to the inbox screen. Instead, just swipe from right to left (for older threads) or left to right (for more recent threads).

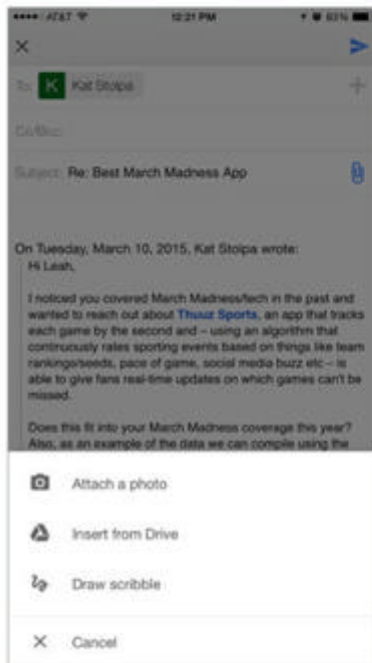
## ATTACH BIG GOOGLE DRIVE FILES TO YOUR MESSAGES

**4** With a little help from Google Drive, you can send a massive file to a friend via email, or deliver a large batch of files.

Don't have a Google Drive account? Well, if you're using Gmail, you've actually got one already ([go.macworld.com/drive](http://go.macworld.com/drive)).

First, you'll need to load the files you want to send into Google Drive. Open your Google Drive account, then drag the file you want to send onto the webpage. The file should begin uploading automatically.

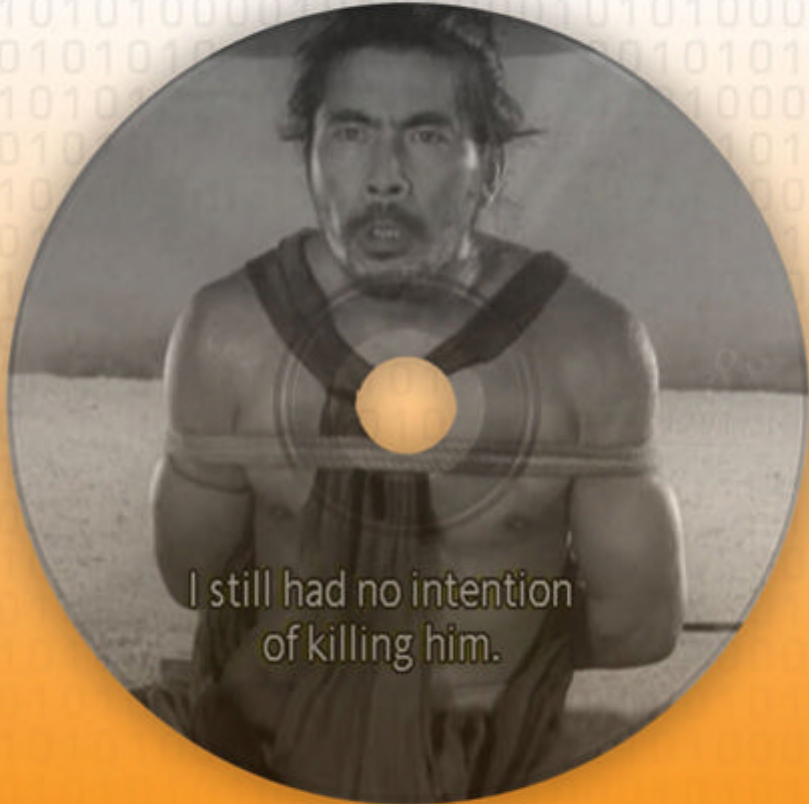
Next, open the Gmail app, compose a new message or reply to an existing one, tap the Attach button (it



**ATTACHING A FILE** from Google Drive is just like attaching any other file.

looks like a paperclip), then tap Insert from Drive.

Find the file you want to send, tap it, then tap the Attach button again. ■



## Everything you need to know about ripping DVDs with subtitles

BY KIRK MCELHEARN

If you like watching foreign movies, you may find that, when seeking out new films, you can only get the movie you want in a version without subtitles. This is great if you're bi- or multi-lingual, but if not, you really need to know what the actors are saying.



In this article, I'm going to look at subtitles: how you can play them in movies that already contain them, how you can add them to movies you rip from DVDs, and how you can create your own subtitles or captions.

## SWITCH LANGUAGES WITH ITUNES STORE MOVIES

Some movies you buy in the iTunes Store come with multiple language tracks and subtitles. You can access these in iTunes by starting to play a movie and then clicking the speech balloon button. From this menu, select the audio or subtitles language (or closed captioning) you want. You can also use iTunes' *Controls* → *Audio & Subtitles* command.

On an iOS device, tap the similar button at the bottom of the Videos screen to choose from the same options.

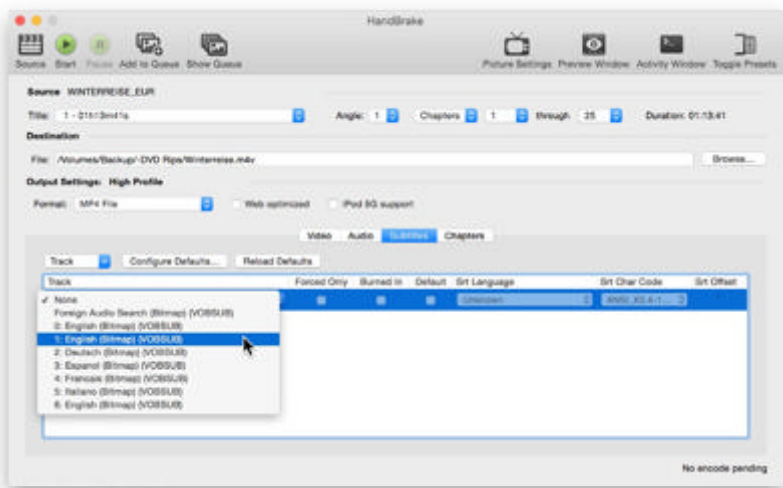
On the Apple TV, these options are hidden. To access them, press and hold the Select button (the center button) on your remote. You'll see three tabs: Chapters, Subtitles, and Audio. Select the tab you want, then choose your language.

## ADD SUBTITLES TO DVD RIPS

If you buy foreign movies on DVD and you get them from the country where they're produced, they may not have subtitles for English or for another language you speak. If you rip these DVDs (see our guide to

**SOME MOVIES**  
from the iTunes Store come with multiple languages and subtitles.





**IF YOU'RE RIPPING** a DVD that has subtitles, you can have Handbrake add these to your rip.

ripping DVDs with Handbrake at [go.macworld.com/hbrake](http://go.macworld.com/hbrake)), you can add subtitles to them.

First, let's take a DVD that already has subtitles. In Handbrake, after you've chosen your ripping settings, click the Subtitles tab. Under Track, click on the pop-up menu. If subtitles are available, select your language.

If there are no subtitles, then you need to find them. There are a number of crowd-sourced subtitle repositories you can check, such as [opensubtitles.org](http://opensubtitles.org). Find your movie or TV show and then download the subtitles. These will be in an .srt file.

In Handbrake, click the Track pop-up menu in the Subtitles tab and then choose *Add External SRT*. Select your file, and then click OK. You have three options. Enable

Forced Only if your subtitles are for a film that has some sections in a language different from the audio track. For example, in a James Bond movie, when characters are speaking Russian, you'll see subtitles (unless you're listening to a Russian audio track). Enable Burned In if you want the subtitles to be permanently planted in the video; in this case, you can never turn them off. Finally, check Default if you want the subtitles to be turned on by default.

During playback, in iTunes or on the Apple TV, you can choose the subtitles the same way as I described above, unless, of course, they're burned in. In this case, they'll always appear. If you play back the video with other software, such as VLC, choose the Subtitles menu to set subtitles.

Subtitles from opensubtitles.org may not be perfect. As I said, these are crowd-sourced, and there may be glitches, or translations that are not as good as what professional translators may provide. But it's better than nothing.

If you want to add subtitles to movies you've already ripped, you can do that using Subler ([go.mac-world.com/subler](http://go.mac-world.com/subler); donation requested). This app will allow you to add .srt files to existing videos.

## ROLL YOUR OWN SUBTITLES

An .srt file is simply a text file formatted in a specific way. You can create your own subtitles and add them to your movies, as described above. To do this, you can either use a text editor or a dedicated tool for creating .srt files. Using a text editor is compli-

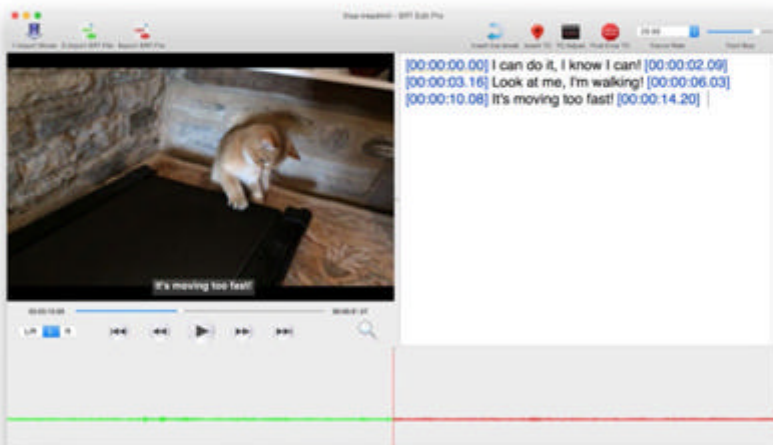
cated because you need to know the precise time codes.

Here's what .srt files look like. Each subtitle has a number, and its duration on screen is specified by time codes. Time codes are in the format hours:minutes:seconds,milliseconds.

```
0
00:00:00,000 -->
00:00:02,300
I can do it, I know I can!
```

```
1
00:00:03,533 -->
00:00:06,100
Look at me, I'm walking!
```

```
2
00:00:10,266 -->
00:00:14,667
It's moving too fast!
```



### SRTEDIT PRO

makes it easy to create subtitles for your videos.

A great tool for creating and editing .srt files is bin liu's \$10 SRT Edit Pro ([go.macworld.com/srt](http://go.macworld.com/srt)). This app allows you to see your video and an audio waveform (so you can tell when dialog begins and ends), and lets you insert time codes and subtitles.

Find where you want a subtitle to begin and click *Insert TC*. Type your subtitle after the time code and then, at the location where you want the subtitle to no longer be visible, click *Insert TC* again. Continue through your video. You can use the audio waveform to show you when dialog begins and ends. It's best if your subtitles correspond, as much as possible, to the timings of people speaking.

You can also use SRT Edit Pro to edit existing .srt files that you've downloaded, if you want to make corrections to them. Once you have your .srt file, you can add it to your video with Handbrake, as explained above.

If you're making your own subtitles, I have some tips that can help you make them easier to read. Back in the day, when I worked as transla-

tor, I translated a number of French movies for English subtitles. This was before the type of software that's now available. I was given time sheets with time codes and character counts and little else. The standard was no more than 18 characters per second, with no more than around 36 characters per line. A subtitle

**...IF YOU HAVE SOME DIALOG WITH SHOTS THAT CUT BACK AND FORTH, YOU SHOULD TRY TO MAKE EACH OF YOUR SUBTITLES FIT WITH A SINGLE SHOT.**

should never overlay a cut; in other words, if you have some dialog with shots that cut back and forth, you should try to make each of your subtitles fit with a single shot. You may need to compress the text by leaving out some words. If you want to know more, the BBC ([go.macworld.com/bbcguide](http://go.macworld.com/bbcguide)) has an excellent guide to subtitling for closed captions, but the principles are the same for foreign language subtitles. ■



**“ SURE,  
AT FIRST I WAS A LITTLE TAKEN ABACK  
BY THE WHOLE PEEING STANDING UP THING.  
BUT I TAUGHT HIM TO THROW A STICK  
AND NOW HANGING OUT WITH HIM  
IS THE BEST PART OF MY DAY.”**

**— EINSTEIN  
adopted 12-09-10**

**A PERSON  
IS THE BEST  
THING TO HAPPEN  
TO A SHELTER PET**



**adopt**

[theshelterpetproject.org](http://theshelterpetproject.org)





## Ask the iTunes Guy

Deleting iTunes Radio, death of the old Info window plus cleaning up the iTunes Library

BY KIRK McELHEARN



## Q&A

iTunes, like most software, requires that you do things in a certain way. It isn't very flexible for users who think differently. For example, why would anyone want to get rid of iTunes Radio? Why would iTunes users wish to sort their music by artists' last names, then first names? And why would you want to use a more capable Info window to tag files? Because that's the way you prefer to work? Let's explore.

## DELETING ITUNES RADIO

**Q: Is there a way to disable iTunes Radio? I don't use it and I sometimes click it by accident. It also pops up every time I launch iTunes, asking me for my iTunes password, which is driving me mad.**

**A:** There is a way to hide iTunes Radio, but to do this you also have to hide the iTunes Store. You can do so by choosing *iTunes* → *Preferences*, and then clicking Parental. The Parental Control preference lets you block certain features that you may not want your kids to access.

One of these is the iTunes Store. If you check this, and then click OK, you'll see that buttons for

the iTunes Store and iTunes Radio no longer appear. (Note that Internet Radio is different from iTunes Radio. It's a feature for listening to Internet radio streams within iTunes.)

If you want to access the iTunes Store, this isn't ideal. Each time you intended to visit the iTunes Store you'd have to unblock it from the preferences. But if you don't visit the store very often, you might find this a suitable solution.

I can't imagine that Apple will allow people to hide iTunes Radio any other way as it's partly a tool to sell music. Plus, with rumors that Apple will be adding a music streaming service to iTunes in the near future, I would expect to see it even more



**YOU CAN HIDE**  
iTunes Radio  
by hiding the  
iTunes Store.

tightly integrated into iTunes.

## NOSTALGIC FOR THE OLD-FASHIONED INFO WINDOW

**Q:** I like to use the “old” Get Info window for tracks in iTunes, accessed by right-clicking the track and holding down the Option key while selecting Get Info. I just upgraded to iTunes 12.1 and this trick no longer works. Is my beloved “old view” Get Info window gone forever?

**A:** I’ve mentioned that window several times in my Ask the iTunes Guy columns, such as here: [go. macworld.com/ask](http://go.macworld.com/ask). I called it the “old-fashioned” Info window.

Unfortunately, Apple removed this when they released iTunes 12.1. I suspect that it was a bug in iTunes 12.0 that allowed access to that window. It’s a shame, because it’s a much more flexible tool for tagging files.

## MY TAGS KEEP CHANGING

**Q:** In recent versions of iTunes I’ve tried to change certain artists names by right clicking on an item and changing it in the Info window. The change will take effect but then every time Apple updates iTunes, the changes are reset. How do I make permanent changes to track info such as artist name or even song name?



**A:** This problem seems to be more prevalent than before; I’ve been getting a lot of emails about it. There’s a setting in iTunes’ preferences that causes this problem. For example, if you have purchased music from the iTunes Store and have checked *Show iTunes in the cloud* purchases, iTunes will not only display your purchased tracks, but will “correct” their tags to match what’s in the iTunes Store, if you’ve made any changes.

The only way to stop this is to uncheck that setting. Unfortunately, Apple doesn’t understand that you may want to use iTunes in the Cloud, but not use all of its tags. I discussed this in an article on my website ([go. macworld.com/kirkville](http://go.macworld.com/kirkville)) last year; I

**HERE’S WHAT** the “old-fashioned” Info window looked like in iTunes 12.0.



also explain an easy way to get back the changes you made to your tags.

If you uncheck this setting you won't be able to download items directly from your iTunes library. Instead, you'll have to go to the iTunes Store and download them from your Purchased list. You can access the Purchased list by clicking the button in the iTunes toolbar that shows your name and then choosing Purchased.

## **SORT, ORDER**

**Q: As my iTunes music library grows, I find it more difficult to find the music I want when I list music by artist. I'd like to show my artists with their last names first. Is there any way to do this?**

**A:** Alas, no. It would make sense, allowing users to see Springsteen, Bruce, instead of Bruce Springsteen. I do this for the names of classical music composers, but I've never considered doing it for other artists.

However, there are a number of potential problems. What do you do for a band such as The Beatles? Would it be changed to Beatles, The? And how about Jethro Tull?

The only way to do this is manually, and that can take a while. Select all the tracks by a given artist and then press *Command-I*. In the Artist and Album Artist field, change the

**I DO THIS FOR THE NAMES OF CLASSICAL MUSIC COMPOSERS, BUT I'VE NEVER CONSIDERED DOING IT FOR OTHER ARTISTS.**

name, and then click OK. Naturally, you only need to change artists whose personal names appear, not band names, so you won't have to change your entire music library.

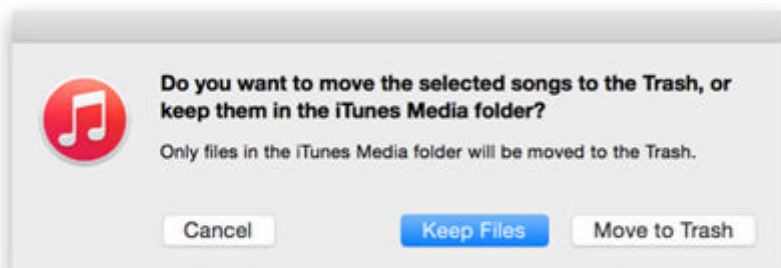
If you do this, remember to make the change each time you add or purchase new music, or you'll have music by some artists listed out of order, or even twice.

## **CLEANING UP YOUR ITUNES LIBRARY**

Like children, or weeds, an iTunes library has the tendency to grow and grow. Your Mac's internal storage does not. iTunes 12 segments your media in a way that makes it easy to forget you have a bunch of audio-books, podcasts, or old TV shows in your library that probably don't need to be there anymore. But iTunes also makes it easy to back that media up in another location, so it's safe to delete and free up space on your Mac.

## **OFFLOADING AUDIOBOOKS**

**Q: I have so many audiobooks that I'm wondering if I could remove some of them from my iTunes**



**ONCE YOU'VE COPIED** the files to another folder, you can delete them. Tell iTunes to put them in the Trash.

### library and hold then in a folder somewhere on my iMac?

**A:** You sure can. And audiobooks are good candidates for removal from your iTunes library, because you're less likely to want to listen to them again for a while, unlike music.

What I'd suggest is that you start by making a new, empty playlist, and then drag to that playlist everything you want to remove from your iTunes library.

Next, create a folder in the Finder for either your audiobooks, or all iTunes content that you're planning to remove from your library. (If you're removing different types of content, you can also make sub-folders by media type.) You may want to put this folder on an external drive to recover space on your Mac's internal storage device.

Drag the items from the playlist you created in iTunes to the folder (or sub-folder) you created above; you'll see that each file is copied (or moved) to the folder. They're moved

if the folder is on the same hard drive as your iTunes Media folder, and they're copied if the folder is on a different drive.

Once you've copied everything, check that all the files are in the folder, select all the items in the playlist, and then press Command-Option-Delete. If iTunes asks if you want to keep the files or move them to the Trash, choose the latter.

You can do this for any files that are taking up space on in your iTunes library. You can move TV shows, movies, music or apps you don't use to another folder, or to another drive.

### REMOTE APP MISSING ARTWORK

**Q:** When i play music on my iMac, I am often away from my desk but well within earshot of my speaker system. It is convenient to use my iPhone to see what is playing, and I use the Remote app for this. Prior to iOS 8, the app would display the artwork for the currently playing track, but it no longer does this. Is

**there a setting that I am overlooking?**

**A:** It seems that this is a bug that's been in iOS since the release of iOS 8, but that only affects certain devices. I had expected it to be fixed in one of the iOS updates—such as this week's iOS 8.2—but it hasn't been yet.

The Remote app displays a text placeholder where the album art is. However, if you tap Up Next, you'll see thumbnails of the artwork for the coming tracks.

It does work fine on some devices, such as my iPod touch (5th generation) and my non-retina iPad mini. I don't know why this is the case.

### **A GENIUS FOR ALL SEASONS**

**Q:** I like to use Genius Mix playlists in iTunes 12, but there's one catch. Whenever iTunes generates these playlists it incorporates my holiday music into the selections. Is there a way to prevent Genius Mixes from including certain items? I don't want to listen to Christmas songs in the summer.

**A:** Just as you can't exclude items from iTunes Match, you can't tell Genius only to look at certain songs. You can move your holiday music out of your iTunes library during the part of the year when you don't want to

hear it. A question above explains how to do this.

### **CAN'T BUY ME PLAYLIST LOVE**

**Q:** Why, for the love of mix tapes, would Apple remove the ability to gift a playlist? Have they no sense of romance? Do they not understand the power of a thoughtfully compiled and gifted set of songs? There are loves that wouldn't have blossomed... Babies that wouldn't have been born... Road trips that would have been totally lame if it weren't for homemade music compilations. I heard that at one point in 1985 Gorbachev was minutes away from pushing the big red button, but Reagan sent him a KILLER mix tape of mostly rare Erasure bootlegs. Now those kinds of surprises are nearly impossible. So, now, I'm supposed to share a playlist with someone, send her a gift card, and hope she'll use apply it to the playlist? I'm sure her heart will be all aflutter. I hope they bring it back. For the children's sake. There's simply no telling what kind of damage has already been done.

**A:** What he said.

iTunes removed the ability to gift playlists in iTunes 11, and many people miss this. It's almost enough to make a guy burn a CD... ■

# HELP DESK

Answering Your Questions and Sharing Your  
Tips About Getting the Most From Your Mac



## Mac 911

Solutions to your most vexing Mac problems.

BY GLENN FLEISHMAN

### Making DVDs from old iMovies and slideshows

I still remember the glorious day when I first encountered writable CDs. It was in the early 1990s with a \$100,000 system designed by Kodak to produce its Photo CDs, discs that worked with its CD/DVD player and with computer software to provide galleries and high-resolution scans. It took years before CD burners were included in inexpensive PCs (and, late to the party, Macs), and the CD media dropped in price.

Then the DVD format went through a similar, but much more rapid cycle, and then on to Blu-Ray, the winner in the high-definition home video format years ago. But I haven't owned a computer that can burn DVDs for years. Once hard drives outstripped the capacity to back up to more than a handful of discs and drives

also became cheap to use for backup, coupled with cloud storage and online sharing, it all seemed pointless.

I'm not alone in feeling this way, but two questions from readers sparked this walk down writable memory lane.

## Old iMovie, new Mac

**Q:** I have 2006-era iMovie projects, but the latest version of iMovie won't import them. Is it still possible to obtain older versions to refresh the files as I want to produce DVDs I can pass on to my kids? There must be someone who has archived all the program versions for Macs over the years. Any ideas about how I can retrieve these files?

Karl Hess

**A:** I consulted friend, colleague, and frequent *Macworld* contributor Jeff Carlson, who wrote extensively in the past about iMovie. He says that while Apple used to offer iMovie HD 6 as a free download for people who didn't want to shift to iMovie '08, that's no longer the case. (I'd avoid non-Apple sites that offer it free; you have no way to determine whether the disk image has been tampered with.) And the current iMovie (version 10) can't import iMovie HD 6 projects.

One strategy is to find someone who has an older, working Mac with iMovie '08 installed, import your

project there, then copy it to your computer. iMovie HD also works on OS X up to Mavericks if you can get a copy to install.

The latest iMovie (version 10) can import versions 7 (which Apple called iMovie '08), 8 ('09), and 9 ('11). There's a host of provisos from Apple ([go. macworld.com/host](http://go.macworld.com/host)) just about the limitations of importing into version 10, so it may require a fair amount of rework. (You can also find the version number by selecting iMovie in the Applications folder, choosing *File* → *Get Info*, and referring to the version number under the General section.)

Jeff says that although this might not be welcome advice, re-editing the original clips—which Karl should have because they're part of an iMovie project—might be the best strategy and involve the least work. (For an old project, right-click and you'll see Show Package Contents. Choose that, and all the clips that were imported are nested in folders.)

The other question, however, about



**FIND THE** version number of iMovie using Get Info

producing DVDs—let’s join that with another reader’s query on putting photos on DVD.

## DVDs and times gone by

**Q:** I’d like to make a slide show of holiday snaps that I can transfer to DVD, which I’ve been able to do in the past. How do I do this without iDVD?

Lyn Cuneo

**A:** With the demise of iDVD as supported software, she’ll need to turn to a third-party solution; iDVD used to act as a conduit. Likewise for Karl, and his movies.

My Mac 911 predecessor, Chris Breen, pointed to a few options ([go. macworld.com/chris](http://go.macworld.com/chris)) that are still valid, including getting an old copy of iLife that included iDVD and installing it under Mavericks. (I haven’t tried running iDVD in Yosemite because...I don’t have it installed anywhere. Some reports indicate it won’t work.)

For photos, you can use any version of iPhoto to export a slide-show as a movie. Select an album or event in iPhoto, then *File* ➔ *Export* and click the Slideshow tab. For DVD, Standard Definition is all that’s needed. Then with iDVD (if available), Toast 12 Titanium, or Burn (all mentioned in Chris’s article), you can push that slideshow to a playable disc.

However, in 2015 while it’s a reasonable choice to use a DVD to make something ephemeral you want to share with people who may or may not have broadband Internet access, it’s no longer a good archival format. That is, sharing holiday photos so a relative can pop it into a DVD works, but if you expect the disc to be a family heirloom, not so much.

**DISCS DEGRADE UNDER THE BEST OF STORAGE CONDITIONS, AND THE WRITABLE KIND ARE HIGHLY VARIABLE IN THEIR LONG-TERM READABILITY**

Jeff Carlson notes that DVDs have relatively low resolution relative to most video produced in the last several years, as well as compared to the resolution of cameras in the last decade. Blu-Ray is much higher resolution, but the problem of media persists: Discs don’t last forever, and the writable kind are highly variable in their long-term readability. Find a 10-year-old CD-R, and pop it in—does it still work? Maybe. But discs degrade even in perfect humidity and temperature control, and more rapidly in garages in attics.

So what to do? Backup drives (more than one) that you rotate and retire; secure cloud storage; and distribution of digital assets to people you want to

have them. I'll write more about this, but CDs, DVDs, and Blu-rays—they're not as good as paper books, much less spinning and flash media.

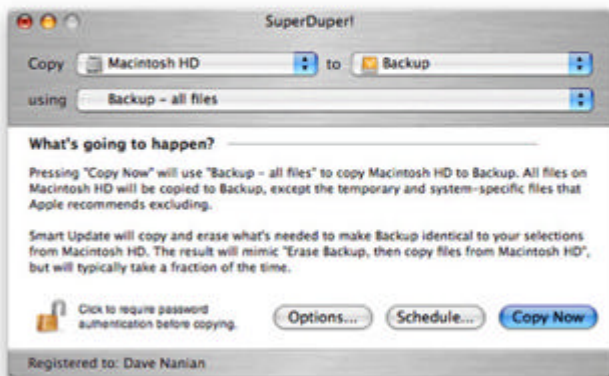
## As many as grains of sand on the beach

**Q:** My Mac used to have less than a million files (according to various tools, including SuperDuper!), and now it's [up] to 1.3 million. Trust me, I haven't knowingly created 300K new file recently! Those zillions of stray files don't seem to consume much space, but tools like SuperDuper! and Disk Utility "verify disk" need to process each and every one of them in one way or another. What are they? Where are they?

Doug Eldred

**A:** Mac OS X (and, invisibly, iOS) has always had an inordinate quantity of files because of its Unix underpinnings. There is something about Unix that loves a multiplicity of tiny files rather than monolithic larger ones, hence these huge counts.

In the way back, in the long ago, it used to matter, because each file consumed a minimum amount of hard disk space regardless of the actual amount of data in it, and no more than 65,536 files on the drive. With HFS+, however, a drive can



have nearly 4.3 billion files without each consuming unreasonable amounts of space.

To my recollection and experience, the number of files shouldn't contribute to any system slowdowns because they're inert unless needed. But during the cases that Doug mentions, could it cause delays? And why are there all these files being created, anyway?

I turned to an expert: Dave Nanian, the founder of Shirt Pocket ([shirt-pocket.com](http://shirt-pocket.com)), makers of the SuperDuper! app ([shirt-pocket.com/superduper](http://shirt-pocket.com/superduper)) that Doug uses. SuperDuper! is a disk backup utility that makes an exact, bootable clone of a drive. I have it scheduled to run every night on my main computer in addition to two other forms of incremental document backup.

Dave writes: Ah, 1.3 million files. I remember those early days, back when laptops were made of plastic,

**SUPERDUPER! MAKES** it easy to clone your drive, no matter how manly million "files" you have.



and chips by IBM. But today, you're not alone. The laptop I'm typing on right now has—according to Disk Utility—6,709,682 files. Make that, two seconds later, 6,709,687. In general, especially if you're not seeing excessive disk usage, this just isn't something to worry about. There are a lot of hidden folders on your drive, sometimes entire hierarchies that are emulating things that can't be directly expressed in HFS+, but are still counted as “files,” even though you wouldn't ever access them that way.

Apple implemented Time Machine in a very peculiar way by most developers' reckoning to create an exact copy without duplicating every file. Using so-called hard links, which allows a single copy of data to appear multiple times in a folder hierarchy, Time Machine creates hidden folders that fully replicate a hard disk's file structure. A Time Machine backup comprises mostly hard links pointing to existing files or folders unchanged since the previous backup. Each hard link is counted by OS X as a separate file.

Dave notes that Time Machine also stores a sort of local backup on the startup drive to improve its performance in copying to a local drive or a remote one over the network. Most other backup software makes an initial copy of a file and then a “delta,” or a kind of summary of differences, for every version stored thereafter.

And Spotlight contributes to the file count: for better indexing, Mac apps have reference files for each quantum of data, such as an email message, to match a result up with an item. On one machine, I have hundreds of thousands of metadata files associated with email messages. Combine Spotlight and Time Machine, and you can see where the file count comes from. I don't use Time Machine and have nearly 1.8 million files on my MacBook Air.

Dave has consoling words, though: I wouldn't worry about it too much — let the system handle its files, and don't be too concerned about the count. As long as your drive isn't mysteriously filling up, you're good.

## Selective Time Machine

**Q:** When I reinstall Mac OS X (to solve performance problems, or clear space) I have a restore option to migrate data from my Time Capsule, but it currently only gives me options to migrate entire user profiles, applications, and settings. How may I pull only selected data (such as images, and iTunes media like music and movies, and documents) rather than an entire profile? I fear that restoring an entire profile may also restore any problems that made me want to reinstall OS X.

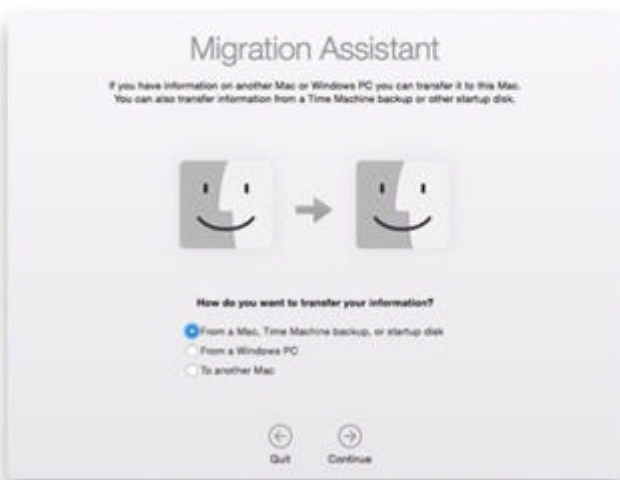
Larry Landen

**A:** It's a sensible and reasonable question: If some kind of corrupted or inaccurate setting is causing system problems, aren't you just asking for trouble by bringing all your settings over? Likely no. With the exception of specific applications having corrupted configuration files, a clean installation and a migration of settings generally seems to avoid causing identical problems in OS X. (Solving corrupt app settings varies, but often involves tossing a file or several from **~Library/Preferences/** with the advice of the software's maker.)

That's in part because the corruption or other setting issues you're having can result from missing or overwritten system files or configurations that aren't copied back as part of a Time Machine migration.

With Migration Assistant, however, which you can launch on a computer after you've reinstalled and updated OS X, you can select certain sets of data ([go.macworld.com/data](http://go.macworld.com/data)) to re-import, and can omit all your settings.

Another option, is to use Super-Duper! or Carbon Copy Cloner ([bombich.com](http://bombich.com)) to back up a volume, or software-service combinations like Backblaze or Crashplan for specific files or folders. Then you can more easily pick and choose what to restore.



## Photos! Photos! PHOTOS!

Your questions about the new Photos app for OS X continue to pour in! With no new information since the last details from Apple, we'll let you know more when it's available. Plenty of issues are unclear, including how to prepare multiple photo libraries to import into a single Photos collection.

My best advice at this moment? When Photos for OS X ships don't install it and upgrade immediately. It's going to be a big shift, and you're better off waiting to read reports on what goes wrong or even waiting for a 1.0.1 ■

You can email things that perplex you or need solving to [mac911@macworld.com](mailto:mac911@macworld.com).

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